DRAFT

# Program Environmental Impact Report

## County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update

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Prepared for:

**County of Monterey**
**168 West Alisal Street, 3rd Floor**
**Salinas, California 93901**

Prepared by:

**450 Lincoln Avenue, Suite 103**
**Salinas, California 93901**

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## Appendices

Appendix A. NOP and NOP Comments

Appendix B. Proposed Amendments to Plans and Policies

Appendix C. Draft By-Right Housing Ordinance (includes draft Zoning Clearance Ordinance as an attachment)

Appendix D. Draft Monterey County Model Objective Design Standards

Appendix E. Example CEQA Guidelines Section 15183 Exemption Checklist

Appendix F. Air Quality Technical Memorandum

Appendix G. Biological Resources Technical Report
Appendix H. Cultural Resources Technical Report
Appendix I. Fuel Use Worksheet
Appendix J. GHG Technical Memorandum
Appendix K. Noise Technical Report
Appendix L. VMT Memorandum
Appendix M. Evacuation Educational Materials

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## *Acronyms and Abbreviations*

| | |
|---|---|
| $\mu g/m^3$ | micrograms per cubic meter |
| °C | degrees Celsius |
| °F | degree Fahrenheit |
| 1982 General Plan | 1982 Monterey County General Plan |
| 2010 General Plan | 2010 Monterey County General Plan |
| AB | Assembly Bill |
| ACM | asbestos-containing material |
| ADA | Americans with Disabilities Act |
| ADT | average daily traffic |
| ADU | accessory dwelling unit |
| AF | acre-feet |
| AHO | Affordable Housing Overlay |
| AI | Agricultural Industrial |
| AIA | Airport Influence Area |
| ALUC | Airport Land Use Commission |
| ALUCP | Airport Land Use Compatibility Plan |
| AMBAG | Association of Monterey Bay Area Governments |
| AP | Area Plan |
| APE | area of potential effect |
| APFS | adequate public facilities and services |
| AQMP | Air Quality Management Plan |
| ASTM | American Society for Testing and Materials |
| ATP | Active Transportation Plan |
| BACM | best-available control measures |
| BAU | business as usual |
| BESS | battery energy storage system |
| BEU | California Department of Forestry and Fire Protection San Benito-Monterey Unit |
| BMAP | Basin Management Action Plan |
| BMP | best management practice |
| BMR | below-market-rate |
| BRT | bus rapid transit |
| BRTR | biological resources technical report |
| Btu | British thermal units |
| CA HCD | Housing and Community Development |
| CAA | Clean Air Act |
| CAAQS | California ambient air quality standards |
| CAF | Confined Animal Facility |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Cal/OSHA | California Occupational Safety and Health Administration |
| Cal-Am | California American Water Company |
| CalEEMod | California Emissions Estimator Model |
| CalEPA | California Environmental Protection Agency |
| CALGreen | California Green Building Standards Code |

| | |
|---|---|
| CalRecycle | California Department of Resources Recycling and Recovery |
| CalSites | Site Mitigation and Brownfields Reuse Program Database |
| Caltrans | California Department of Transportation |
| CAPCOA | California Air Pollution Control Officers Association |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CCAAP | Community Climate Action and Adaptation Plan |
| CCC | California Coastal Commussion |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERCLIS | Comprehensive Environmental Response, Compensation, and Liability Information System |
| CESA | California Endangered Species Act |
| CFC | California Fire Code |
| CFGC | California Fish and Game Code |
| CFR | Code of Federal Regulations |
| CGC | California Government Code |
| $CH_4$ | methane |
| CHMP | Coast Highway Management Plan |
| CHRIS | California Historical Resources Information System |
| CIP | Coastal Implementation Plan |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| COG | Council of Governments |
| County Code | Monterey County Code |
| County | County of Monterey as a government entity |
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CRPR | California Rare Plant Rank |
| CRTR | Cultural Resources Technical Report |
| CUPA | Certified Unified Program Agency |
| CVMP | Carmel Valley Master Plan |
| CWA | Clean Water Act |
| dB | decibel |
| dBA | A-weighted decibel |
| DEM | Department of Emergency Management |
| DMA | Disaster Mitigation Act |
| DOC | California Department of Conservation |
| DPM | diesel particulate matter |
| DSOD | Division of Safety of Dams |

| | |
|---|---|
| DTSC | California Department of Toxic Substances Control |
| DUC | disadvantaged unincorporated community |
| DWR | California Department of Water Resources |
| EHB | Environmental Health Bureau |
| EIR | Environmental Impact Report |
| EMFAC | Emissions Factor |
| EO | Executive Order |
| EOP | Emergency Operations Plan |
| ESA | Environmental Site Assessment |
| EV | electric vehicle |
| EVSE | EV supply equipment |
| FAA | Federal Aviation Administration |
| FEMA | Federal Emergency Management Agency |
| FESA | federal Endangered Species Act |
| FHSZ | fire hazard severity zone |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Maps |
| FMMP | Farming Mapping and Monitoring Program |
| FORA | Fort Ord Reuse Authority |
| FORTAG | Fort Ord Regional Trail and Greenway |
| FPD | Fire Protection District |
| FRA | federal responsibility area |
| FRAP | Fire and Resource Assessment Program |
| FSZ | Farmland Security Zone |
| FTA | Federal Transit Administration |
| GEMS | Groundwater Extraction Management System |
| GHG | greenhouse gas |
| GIS | geographic information system |
| GMP | Groundwater Monitoring Program |
| GPS | Global Positioning System |
| GSA | groundwater sustainability agency |
| GSP | Groundwater Sustainability Plan |
| GWP | global warming potential |
| HDR | High Density Residential |
| HEU6 | County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update |
| HFC | hydrofluorocarbon |
| HI | Heavy Industrial |
| HMMS | Hazardous Materials Management Services |
| HVAC | heating, ventilation, and air conditioning |
| IADZ | Inner Approach/Departure Zone |
| IBC | International Building Code |
| IFC | International Fire Code |
| IRWM | Integrated Regional Water Management |
| ITZ | Inner Turning Zone |
| kBTU | kilo British thermal unit |

| | |
|---|---|
| kWh | kilowatt-hours |
| LAFCO | Local Agency Formation Commission |
| LAMP | Local Agency Management Program |
| LBP | lead-based paint |
| LC | Light Commercial |
| LCFS | low carbon fuel standards |
| LCI | Governor's Office of Land Use and Climate Innovation |
| LCP | Local Coastal Plan |
| Ldn | day-night noise level |
| LDR | Low Density Residential |
| LESA | Land Evaluation and Site Assessment |
| LOS | level of service |
| LRA | local responsibility area |
| LUP | Lan Use Plan |
| LUSTIS | Leaking Underground Storage Tank Information System |
| MBARD | Monterey Bay Air Resource District |
| MBNMS | Monterey Bay National Marine Sanctuary |
| MBTA | Migratory Bird Treaty Act |
| MCRFPD | Monterey County Regional Fire Protection District |
| MCWRA | Monterey County Water Resources Agency |
| MDR | Medium Density Residential |
| $mg/m^3$ | milligram per cubic meter |
| mgd | million gallons per day |
| MJHMP | Multi-Jurisdictional Hazard Mitigation Plan |
| MM- | Mitigation Measure |
| Monterey County | County of Monterey as a geographic area |
| MOU | memorandum of understanding |
| mph | miles per hour |
| MPO | Metropolitan Planning Organization |
| MPWMD | Monterey Peninsula Water Management District |
| MPWSP | Monterey Peninsula Water Supply Project |
| MRZ | Mineral Resource Zone |
| MST | Monterey-Salinas Transit |
| MT $CO_2e$ | metric tons of carbon dioxide equivalent |
| MTP | Metropolitan Transportation Plan |
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NAGPRA | Native American Graves Protection and Repatriation Act |
| NAHC | Native American Heritage Commission |
| NCAP | North County Area Plan |
| NCCAB | North Central Coast Air Basin |
| NCCP | Natural Community Conservation Program |
| NESHAP | National Emissions Standard for Hazardous Air Pollutants |
| NHTSA | National Highway Traffic Safety Administration |
| NO | nitric oxide |
| $NO_2$ | nitrogen dioxide |

| | |
|---|---|
| NOP | Notice of Preparation |
| NPDES | National Pollutant Discharge Elimination System |
| NRHP | National Register of Historic Places |
| NSLU | noise-sensitive land use |
| NWIC | Northwest Information Center |
| $O_3$ | ozone |
| OADZ | Outer Approach and Departure Zone |
| ODS | Objective Design Standards |
| OPR | Governor's Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |
| OWTS | On-site wastewater treatment systems |
| PCB | polychlorinated biphenyl |
| PCR | Post-Construction Stormwater Management Requirement |
| PEIR | Program Environmental Impact Report |
| PFAS | per- and polyfluoroalkyl substances |
| PFC | perfluorocarbons |
| PG | Permanent Grazing |
| PG&E | Pacific Gas & Electric |
| $PM_{10}$ | respirable particulate matter |
| $PM_{2.5}$ | fine particulate matter |
| POE | Point-Of-Entry |
| Porter-Cologne Act | Porter-Cologne Water Quality Control Act |
| POU | Point-Of-Use |
| ppb | parts per billion |
| ppm | parts per million |
| PPV | peak particle velocity |
| PQP | Public/Quasi-Public |
| PRC | California Public Resources Code |
| project | County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update |
| PV Water | Pajaro Valley Water Management Agency |
| PWPF | Public Works, Parks and Facilities |
| RAP | Remedial Action Plan |
| RA-ROD | Remedial Action Record of Decision |
| RC | Resource Conservation |
| RCRA | Resource Conservation and Recovery Act |
| RDR | Rural Density Residential |
| REC | recognized environmental condition |
| RFS | Renewable Fuel Standard |
| RG | Rural Grazing |
| RHNA | Regional Housing Needs Allocation |
| RMS | root mean square |
| RPS | Renewable Portfolio Standard |
| RPZ | Runway Protection Zone |
| RTDM | Regional Transportation Demand Management |
| RTP | Regional Transportation Plan |

| | |
|---|---|
| RWMG | Regional Water Management Groups |
| RWQCB | Regional Water Quality Control Boards |
| SARA | Superfund Amendments and Reauthorization Act |
| SB | Senate Bill |
| SCS | Sustainable Communities Strategy |
| SDWA | Safe Drinking Water Act |
| $SF_6$ | sulfur hexafluoride |
| SIP | State Implementation Plan |
| SMARA | Surface Mining and Reclamation Act |
| $SO_2$ | sulfur dioxide |
| SOC | Statement of Overriding Considerations |
| $SO_x$ | sulfur oxide |
| SPCC | Spill Prevention, Control, and Countermeasure |
| SR- | State Route |
| SRA | state responsibility area |
| SSZ | Sideline Safety Zone |
| SVBGSA | Salinas Valley Basin Groundwater Sustainability Agency |
| SWRCB | State Water Resources Control Board |
| TAC | toxic air contaminant |
| TAMC | Transportation Agency of Monterey County |
| TCP | Traditional Cultural Property |
| TCR | Tribal Cultural Resource |
| TDC | Transfer of Development Credit |
| TDIF | Transit-Oriented Development Implementation Fund |
| TDM | Transportation Demand Management |
| TDR | Transfer of Development Rights |
| TOD | transit-oriented development |
| UMC | Unincorporated Monterey County |
| USACE | U.S. Army Corps of Engineers |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| UWMP | Urban Water Management Plan |
| VdB | vibration decibel |
| VMT | vehicle miles traveled |
| VO | Visitor Serving/Professional Office |
| VOC | volatile organic compound |
| VS | Visually Sensitive |
| WDR | Waste Discharge Requirements |
| WL | Watch List |
| WSA | water supply assessments |
| WUI | wildland-urban interface |
| ZEV | zero-emission vehicle |

# Executive Summary

This chapter is an executive summary of the Program Environmental Impact Report (PEIR) for the proposed County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project), prepared in compliance with the California Environmental Quality Act (CEQA). This chapter highlights the major areas of importance in the environmental analysis for the proposed project as required by CEQA Guidelines, Section 15123, and provides a brief description of the project, project objectives, project impacts and mitigation measures, alternatives to the project, and areas of controversy/issues raised by the public known to the County of Monterey.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development (CA HCD), while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

For the purposes of the PEIR, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## Overview

As required by CEQA, this PEIR (1) assesses the potentially significant direct, indirect, and cumulative environmental effects of the proposed project; (2) identifies potential feasible means of avoiding or substantially lessening significant, adverse impacts; and (3) evaluates a range of reasonable alternatives to the proposed project, including the required No Project Alternative. The County is the lead agency for the project evaluated in this PEIR and, as such, has the principal responsibility for approving the proposed project.

Pursuant to CEQA Guidelines, this PEIR evaluates the effects of the entire project at a programmatic level. This PEIR will be used by the County to evaluate the environmental implications of adopting the HEU6. Once certified, this PEIR will also be used to tier subsequent environmental analyses for future County residential development projects on the 56 opportunity sites in the project area. Once adopted, the project will guide the redevelopment of the opportunity sites.

## Project Description

The HEU6 is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County's assigned Regional Housing Needs Allocation (RHNA) of 3,326 housing units distributed across four income categories (1,070 extremely low/very low-income, 700 low-income, 420 moderate-income, and 1,136 above moderate-income housing units). Pursuant to legal requirements for the Housing Element, the HEU6 identifies sites in the UMC that are suitable for the development of all housing types, with the capacity to satisfy the housing needs for the current Sixth Cycle. The Sites Inventory has the capacity for at least 4,434 housing units from opportunity sites, 1,117 housing units from pipeline sites under the proposed or existing zoning, and 346 accessory dwelling units (ADUs) potential without specific sites, for a combined total capacity of 5,897 housing units.

Development of the pipeline sites is currently being processed by the County independently of the HEU6. ADUs are not site-specific and could also be developed independently of the HEU6 in areas zoned for single-family or multi-family residential use. As such, pipeline sites and ADUs are evaluated independently of the HEU6 and are not evaluated in this PEIR.

For the purposes of this PEIR analysis, the potential impacts will focus on the physical environmental changes associated with the changes proposed as part of the opportunity sites. As part of the project, the County will rezone the opportunity sites to create enough capacity to meet the RHNA target. Specifically, the opportunity sites will be rezoned to either the HDR/25 (High Density Residential at 25 dwelling units per acre) or HDR/30 (High Density Residential at 30 dwelling units per acre). Refer to Section 3.5.2, Rezoning and Split Zoning, in Chapter 3, Project Description, and Project Impacts and Mitigation in Chapter 4, Environmental Analysis, for further information on the buildout capacity and development assumptions used in the impact analyses of this PEIR.

Along with facilitating the County's RHNA, the update to the Housing Element must identify and analyze significant disparities in access to opportunity (Assembly Bill 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities. The HEU6 establishes programs, policies, and actions to further the goal of meeting the existing and projected housing needs for residents of all income levels throughout the UMC. The HEU6 explains processes by which the County proposes to accommodate the RHNA assigned to the County for the 8-year planning period from 2023 to 2031.

To implement the HEU6, the County proposes to amend the Monterey County General Plan (2010 General Plan), applicable Land Use Plans (LUPs) and Coastal Implementation Plans of the County's

Local Coastal Program (LCP), Monterey County Zoning Code (Title 20, Coastal Zone, and Title 21, Inland Areas), and amend other necessary components to implement the HEU6 and comply with state law. Updates to the 2010 General Plan include amendments to the Circulation Element, Conservation and Open Space Element, Land Use Element, Public Services Element, Carmel Valley Master Plan, Central Salinas Valley Area Plan, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, Greater Salinas Area Plan, North County Area Plan, Toro Area Plan, and to LCP components, including the Carmel Area LUP and North County LUP (refer to Appendix B for a non-exhaustive list of plans and policies that need to be modified as part of the project).

The project also includes consideration of a by-right housing ordinance to facilitate by-right uses under HEU6 implementation programs (H-2.D, H-2.H, and H-3.A) and other future state law that requires by-right housing programs. The by-right housing ordinance would include objective design standards and environmental protection measures to facilitate one of two streamlined processing pathways for future qualifying (i.e., by-right housing) projects. Refer to Section 3.7.3, By-Right Development, and Section 3.7.4, Streamlined Review, for further information regarding the by-right development allowed under HEU6 implementation programs (H-2.D, H-2.H, and H-3.A) and the two streamlined processing pathways for future residential development processing under the HEU6. Refer to Section 3.7.5, By-Right Housing Ordinance, for further discussion of the ordinance.

## Project Objectives

The fundamental purpose of the project is to meet state housing law and comply with the Association of Monterey Bay Area Governments Final Sixth Cycle RHNA Plan 2023–2031. In accordance with Section 15124(b) of the CEQA Guidelines, the County, as lead agency, identified objectives for the project:

1. Prepare a compliant Housing Element that meets the state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031 while balancing economic, environmental, and social concerns.
2. Develop housing policies and programs to facilitate development of new units and preserve existing housing for residents at all income levels to address factors contributing to the statewide housing shortage.
3. Meet the housing needs of all economic segments of community members who live in the UMC areas in a manner that affirmatively furthers fair housing and supports the overall goal of providing safe and decent housing.
4. Provide a range of housing opportunities as near as possible to jobs, transit, services, and schools.
5. Provide adequate buffer with additional RHNA units to comply with the purpose of Senate Bill 166 (No Net Loss Law) and ensure implementation of the HEU6.

6. Update the 2010 General Plan, LCP, Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan, LCP, and County Code into conformance with state housing law.
7. Provide CEQA streamlining for housing development consistent with the HEU6, 2010 General Plan, LCP, and County Code.

## Project Impacts

This EIR examines the potential environmental effects of the proposed project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendix G of the CEQA Guidelines, the potential environmental effects of the proposed project were analyzed for the following environmental issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (Paleontological Resources)
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the direct and cumulative environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that could reduce or avoid environmental impacts. For each impact, Table ES-1 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after implementation of the mitigation measures.

## Summary of Environmental Impacts and Mitigation Measures

Table ES-1 summarizes the impacts and mitigation measures addressed in this PEIR. The project description and full discussion of impacts and mitigation measures can be found in Chapter 3 and Chapter 4 of this PEIR.

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Section 4.1, Aesthetics** | | | |
| Threshold 1: Scenic Vistas | PS | MM-AES-OBJ-1; MM-AES-OBJ-2; MM-AES-CONS-3 | SU |
| Threshold 2: Scenic Resources Within a Scenic Highway | PS | MM-AES-OBJ-1; MM-AES-OBJ-2; MM-AES-CONS-3 | SU |
| Threshold 3: Visual Character or Quality | PS | MM-AES-OBJ-1; MM-AES-OBJ-2; MM-AES-CONS-3; MM-AES-OBJ-4; MM-AES-CONS-5 | SU |
| Threshold 4: Light or Glare | PS | MM-AES-OBJ-1; MM-AES-OBJ-2; MM-AES-CONS-3; MM-AES-OBJ-6 | LS |
| **Section 4.2, Agriculture and Forestry Resources** | | | |
| Threshold 1: Conversion of Farmland to Non-Agricultural Use | PS | MM-AG-OBJ-1; MM-AG-CONS-2; MM-AG-OBJ-3; MM-AG-CONS-4 | SU |
| Threshold 2: Conflict with Zoning for Agricultural Use or Williamson Act Contract | PS | MM-AG-OBJ-1; MM-AG-CONS-2; MM-AG-OBJ-5; MM-AG-CONS-6; | SU |
| Threshold 3: Conflict with Zoning for Forest or Timberland | PS | N/A | SU |
| Threshold 4: Loss or Conversion of Forest Land to Non-Forest Use | PS | MM-BIO-OBJ-1; MM-BIO-CONS-1; MM-BIO-CONS-5 | SU |
| Threshold 5: Other Changes Resulting in Conversion of Farmland or Forest Land | NI | N/A | NI |
| **Section 4.3, Air Quality** | | | |
| Threshold 1: Consistency with Applicable Air Quality Plan | PS | N/A | SU |
| Threshold 2: Cumulative Increase in Criteria Pollutant Emissions | PS | N/A | SU |
| Threshold 3: Sensitive Receptors | LS | N/A | LS |
| Threshold 4: Odors | LS | N/A | LS |

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Section 4.4, Biological Resources** | | | |
| Threshold 1: Candidate, Sensitive, or Special Status Species | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; MM-BIO-CONS-8; MM-NOI-OBJ-1; MM-NOI-CONS-2; MM-NOI-OBJ-4; MM-NOI-CONS-5 | SU |
| Threshold 2: Riparian Habitat and Other Sensitive Natural Communities | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6 | SU |
| Threshold 3: State or Federally Protected Wetlands | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-9; MM-BIO-CONS-10; MM-BIO-OBJ-11; MM-BIO-CONS-12 | LS |
| Threshold 4: Wildlife Corridors and Wildlife Nursery Sites | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; and MM-BIO-CONS-8; MM-NOI-OBJ-1; MM-NOI-CONS-2; MM-NOI-OBJ-4; MM-NOI-CONS-5 | SU |
| Threshold 5: Local Policies or Ordinances Protecting Biological Resources | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; MM-BIO-CONS-8; MM-BIO-OBJ-9; MM-BIO-CONS-10; MM-BIO-OBJ-11; MM-BIO-CONS-12; MM-NOI-OBJ-1; MM-NOI-CONS-2; MM-NOI-OBJ-4; MM-NOI-CONS-5 | SU |
| Threshold 6: Habitat Conservation Plans and Natural Community Conservation Plans | NI | N/A | NI |
| **Section 4.5, Cultural Resources** | | | |
| Threshold 1: Historical Resources | PS | MM-CUL-OBJ-1; MM-CUL-CONS-2; MM-CUL-OBJ-3; MM-CUL-CONS-4 | LS |
| Threshold 2: Archaeological Resources | PS | MM-CUL-OBJ-5; MM-CUL-CONS-6; MM-CUL-OBJ-7; MM-CUL-CONS-8 | LS |
| Threshold 3: Human Remains | LS | N/A | LS |
| **Section 4.6, Energy** | | | |
| Threshold 1: Wasteful or Inefficient Energy Usage | LS | N/A | LS |
| Threshold 2: Conflict with Renewable or Energy Efficiency Plan | LS | N/A | LS |

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Section 4.7, Geology and Soils[1]** | | | |
| Threshold 1: Exposure to Seismic-Related Hazards | LS | N/A | LS |
| Threshold 2: Soil Erosion or Topsoil Loss | LS | N/A | LS |
| Threshold 3: Geologic Stability | LS | N/A | LS |
| Threshold 4: Expansive Soils | LS | N/A | LS |
| Threshold 5: Septic Tanks or Alternative Wastewater Disposal Systems | LS | N/A | LS |
| Threshold 6: Paleontological Resources | PS | MM-GEO-OBJ-1; MM-GEO-CONS-2 | LS |
| **Section 4.8, Greenhouse Gas Emissions** | | | |
| Threshold 1: Generation of Greenhouse Gas Emissions | PS | MM-GHG-OBJ-1; MM-GHG-CONS-2; MM-AG-OBJ-1; MM-AG-CONS-2; MM-AG-OBJ-3; MM-AG-CONS-4; MM-AG-OBJ-5; MM-AG-CONS-6; MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; MM-BIO-CONS-8; MM-BIO-OBJ-9; MM-BIO-CONS-10; MM-BIO-OBJ-11; MM-BIO-CONS-12; MM-TRA-OBJ-1; MM-TRA-OBJ-2; MM-TRA-CONS-3 | SU |
| Threshold 2: Conflict with Applicable Plan | PS | MM-GHG-OBJ-1; MM-GHG-CONS-2; MM-AG-OBJ-1; MM-AG-CONS-2; MM-AG-OBJ-3; MM-AG-CONS-4; MM-AG-OBJ-5; MM-AG-CONS-6; MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; MM-BIO-CONS-8; MM-BIO-OBJ-9; MM-BIO-CONS-10; MM-BIO-OBJ-11; MM-BIO-CONS-12; MM-TRA-OBJ-1; MM-TRA-OBJ-2; MM-TRA-CONS-3 | SU |
| **Section 4.9, Hazards and Hazardous Materials[2]** | | | |
| Threshold 1: Routine Transport, Use, or Disposal of Hazardous Materials | LS | N/A | LS |
| Threshold 2: Release of Hazardous Materials | PS | MM-HAZ-OBJ-1; MM-HAZ-CONS-2; MM-HAZ-OBJ-3; MM-HAZ-CONS-4; MM-HAZ-OBJ-5; MM-HAZ-CONS-6 | LS |
| Threshold 3: Proximity to Schools | LS | N/A | LS |
| Threshold 4: Hazardous Materials Sites | PS | MM-HAZ-OBJ-1; MM-HAZ-CONS-2; MM-HAZ-OBJ-3; MM-HAZ-CONS-4; MM-HAZ-OBJ-5; MM-HAZ-CONS-6 | LS |

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 5: Airport Land Use Compatibility | LS | N/A | LS |
| Threshold 6: Emergency Response or Evacuation Plans | PS | MM-WF-OBJ-1; MM-WF-CONS-2; MM-WF-OBJ-3; MM-WF-CONS-4 | LS |
| Threshold 7: Wildland Fires | PS | MM-WF-OBJ-1; MM-WF-CONS-2; MM-WF-OBJ-3; MM-WF-CONS-4; MM-WF-OBJ-5; MM-WF-OBJ-6 | LS |
| **Section 4.10, Hydrology and Water Quality** | | | |
| Threshold 1: Water Quality Standards | LS | N/A | LS |
| Threshold 2: Groundwater Recharge and Supplies | PS | MM-HYD-OBJ-1; MM-HYD-CONS-2 | SU |
| Threshold 3: Site Drainage and Hydrology | LS | N/A | LS |
| Threshold 4: Activities in Flood Hazard, Tsunami, or Seiche Zone | LS | N/A | LS |
| Threshold 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan | PS | MM-HYD-OBJ-1; MM-HYD-CONS-2 | SU |
| **Section 4.11, Land Use and Planning** | | | |
| Threshold 1: Physical Division of Established Community | LS | N/A | LS |
| Threshold 2: Conflict with Applicable Land Use Plans, Policies, and Regulations | PS | N/A | SU |
| **Section 4.12, Mineral Resources** | | | |
| Threshold 1: Loss of Known Mineral Resources | LS | N/A | LS |
| Threshold 2: Loss of Locally Important Mineral Resource Site | LS | N/A | LS |
| **Section 4.13, Noise** | | | |
| Threshold 1: Excessive Noise Levels | PS | MM-NOI-OBJ-1; MM-NOI-CONS-2; MM-NOI-OBJ-3 | LS |
| Threshold 2: Excessive Groundborne Vibration | PS | MM-NOI-OBJ-4; MM-NOI-CONS-5 | LS |
| Threshold 3: Aircraft Noise | LS | N/A | LS |

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Section 4.14, Public Services** | | | |
| Threshold 1: Physical Impacts from the Provision of Public Services Facilities to Maintain Performance Standards | PS | MM-PS-OBJ-1; MM-PS-CONS-2; MM-PS-OBJ-3; MM-PS-CONS-4 | LS |
| **Section 4.15, Recreation** | | | |
| Threshold 1: Deterioration of Existing Recreational Facilities | PS | MM-REC-OBJ-1; MM-REC-CONS-2 | LS |
| Threshold 2: New or Expanded Recreational Facilities | PS | MM-REC-OBJ-1; MM-REC-CONS-2 | LS |
| **Section 4.16, Transportation** | | | |
| Threshold 1: Circulation System Performance | LS | N/A | LS |
| Threshold 2: Induction of Substantial Vehicle Miles Traveled | PS | MM-TRA-OBJ-1; MM-TRA-OBJ-2; MM-TRA-CONS-3 | SU |
| Threshold 3: Hazardous Design Features | LS | N/A | LS |
| Threshold 4: Inadequate Emergency Access | LS | N/A | LS |
| **Section 4.17, Tribal Cultural Resources** | | | |
| Threshold 1: Tribal Cultural Resources | PS | MM-CUL-OBJ-5; MM-CUL-CONS-6; MM-CUL-OBJ-7; MM-CUL-CONS-8 | LS |
| **Section 4.18, Utilities and Service Systems** | | | |
| Threshold 1: New or Expanded Utilities Facilities | PS | MM-UTL-OBJ-1; MM UTL-CONS-2 | SU |
| Threshold 2: Water Supply Availability | PS | MM-UTL-OBJ-1; MM UTL-CONS-2 | SU |
| Threshold 3: Wastewater Treatment Capacity | PS | MM-UTL-OBJ-1; MM UTL-CONS-2 | SU |
| Threshold 4: Solid Waste Generation | LS | N/A | LS |
| Threshold 5: Compliance with Solid Waste Regulations | LS | N/A | LS |
| **Section 4.19, Wildfire** | | | |
| Threshold 1: Emergency Response or Evacuation Plans | PS | MM-WF-OBJ-1; MM-WF-CONS-2; MM-WF-OBJ-3; MM-WF-CONS-4 | LS |
| Threshold 2: Pollutant Concentrations | PS | MM-WF-OBJ-5; MM-WF-OBJ-6 | LS |

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

| Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| Threshold 3: Installation or Maintenance of Associated Infrastructure | PS | MM-BIO-OBJ-1; MM-BIO-CONS-2; MM-BIO-OBJ-3; MM-BIO-CONS-4 through MM-BIO-CONS-6; MM-BIO-OBJ-7; MM-BIO-CONS-8; MM-BIO-OBJ-9; MM-BIO-CONS-10; MM-BIO-OBJ-11; MM-BIO-CONS-12; MM-CUL-OBJ-1; MM-CUL-CONS-2; MM-CUL-OBJ-3; MM-CUL-CONS-4; MM-CUL-OBJ-5; MM-CUL-CONS-6; MM-CUL-OBJ-7; MM-CUL-CONS-8 | LS |
| Threshold 4: Flooding or Landslides | LS | N/A | LS |
| Threshold 5: Risk of Loss, Injury, or Death | PS | MM-WF-OBJ-1; MM-WF-CONS-2; MM-WF-OBJ-3; MM-WF-CONS-4; MM-WF-OBJ-5; MM-WF-OBJ-6 | LS |

**Notes:** LS = Less than Significant Impact; N/A = Not applicable; NI = No Impact; PS = Potentially Significant Impact; SU = Significant and Unavoidable
[1] Threshold 1 through Threshold 5 of Section 4.7, Geology and Soils, are evaluated in Chapter 7, Effects Found Not to Be Significant.
[2] Threshold 6 and Threshold 7 of Section 4.9, Hazards and Hazardous Materials, are evaluated in Section 4.19, Wildfire.

## Alternatives to the Proposed Project

Section 15126.6(d) of the CEQA Guidelines requires an EIR to provide sufficient information about each alternative to allow for meaningful evaluation, analysis, and comparison with the project. The County selected the alternatives for analysis based on the "rule of reason" and ability for each alternative to meet most of the basic project objectives. Following is a description of the three alternatives:

- **Alternative 1: No Project Alternative.** Under the No Project Alternative, the proposed project would not be implemented. While the No Project Alternative would reduce impacts to a greater degree than all other alternatives, it does not meet any of the project objectives. Without an adopted, compliant Housing Element, this alternative would result in serious repercussions for the County.
- **Alternative 2: Agricultural Preservation Alternative.** This alternative would remove selected opportunity sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are used for agricultural activities to reduce the significant and unavoidable impact on agriculture and forestry resources as described in Section 4.2, Agriculture and Forestry Resources. Replacement sites would be in the Visitor Serving/Professional Office (VO) zoning district. While Alternative 2 could reduce impacts on air quality, energy, greenhouse gas (GHG) emissions, noise and vehicle miles traveled (VMT), impacts on utilities infrastructure and water supply would increase compared to the project. Additionally, Alternative 2 would reduce but not eliminate impacts on agricultural resources in the UMC due to the approved Builder's Remedy project at Opportunity Sites 20, 21, and 22.
- **Alternative 3: Water Conservation Alternative.** This alternative would remove selected opportunity sites within critically over-drafted groundwater basins to reduce significant and unavoidable impacts on groundwater recharge and supplies and future water supply as described in Section 4.10, Hydrology and Water Quality, and Section 4.18, Utilities and Service Systems. Replacement sites would be in the VO zoning district, outside high priority groundwater basins. While Alternative 3 could reduce impacts on air quality, energy, GHG emissions, noise and VMT, impacts on utilities infrastructure and water supply would increase compared to the project. Additionally, Alternative 3 would reduce but not eliminate impacts on critically over-drafted groundwater basins in UMC due to the inclusion of California Housing and Community Development Department suggested sites (Opportunity Sites 12 and 13).

Detailed descriptions and an analysis of potential impacts of each alternative are presented in Chapter 6, Alternatives. Table ES-2, Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project, provides a comparison of the potentially significant impacts for the alternatives to the project. The environmentally superior alternative would be Alternative

3, the Water Conservation Alternative, because it would result in the greatest reduction in environmental impacts compared to the proposed project.

## Potential Areas of Controversy and Issues to Be Resolved

A Notice of Preparation (NOP) was circulated for public and public agency review from October 21, 2024, through November 20, 2024 (included as Appendix A). The County held a public scoping meeting on November 7, 2024. Public agencies and members of the public were invited to attend and provide input on the scope of this PEIR. Comments from the public and public agencies in response to the NOP are provided in Appendix A.

Issues raised by the public during the NOP circulation and public scoping period include concerns related to development on rural greenfield areas rather than urbanized infill areas. A public scoping comment from LandWatch Monterey County suggested the need to remove Sites 1, 2, 24 through 26, 40, 47, 48, and 52 to address their concerns related to developing on undeveloped sites and associated impacts on farmland, biological resources, VMT, and associated air pollutant and GHG emissions. It should be noted that the public scoping comment from LandWatch Monterey County referred to a previous iteration of Opportunity Site 52 (located in the community of Pajaro), which was removed and replaced with a new Opportunity Site 52 in a different location (located near the city of Monterey, known as Tarpy Flats). Site 1 was included in the Sites Inventory because the owner of the property is highly interested in residential development on that site. In addition, Site 47 was included in the Sites Inventory due to owner interest (York School) in residential development.

The Head of York School Monterey submitted a public scoping comment in response to the LandWatch comment letter to clarify items regarding Site 47, which is owned by York School. The letter clarified that Site 47 is not vacant land, as it is currently developed with a soccer field, football field, and track, which serve students of York School. The letter also discusses the availability of water and electric service at the site, the location and surrounding land uses, York School's commitment to development, and the benefits of providing affordable and moderate income housing in proximity to the Ryan Ranch area.

There is also public controversy regarding the current Opportunity Site 52. The public's major concerns associated with Site 52 are related to impacts on biological resources, increased traffic, and risk of wildfires. The County is proposing to split zone Site 52 to maintain a portion of the property dedicated to resource conservation and protect biological resources by maintaining a wildlife movement corridor at the site. Impacts related to increased traffic and risk of wildfires are discussed in Section 4.16, Transportation, and Section 4.19, Wildfire, of this PEIR, respectively.

There are also cultural and Tribal Cultural Resources concerns at Opportunity Site 52; however, the split zoning approach for this site is also intended to avoid impacts on and address concerns

related to the Tribal cultural significance of the site. Refer to Section 4.5, Cultural Resources, and Section 4.17, Tribal Cultural Resources, for further discussion of items identified and requested by the Tribes.

Increased vehicle traffic and congestion from development is a major public concern, particularly in Carmel Valley and along State Routes 1 and 68. Specifically, public comments in response to recent Builder's Remedy projects in the Carmel Valley region have raised concerns related to the effect that increased vehicle congestion may have on the efficiency of emergency evacuations. Refer to Section 4.16, Transportation, for discussion of the project's impact on vehicle traffic and Section 4.19, Wildfire, for discussion of impacts related to evacuation and emergency access.

Following the NOP, the County received public comments related to airport compatibility. The Monterey County Airport Land Use Commission also raised concerns about portions of opportunity sites within airport safety zones and Part 77 Airspace. Comments related to airport compatibility are predominantly focused on Opportunity Sites 46, 47, and 52. The potential for the project to result in impacts related to airport compatibility is discussed in Section 4.9, Hazards and Hazardous Materials.

Additional potential areas of controversy may include impacts on undeveloped land in UMC, including existing agricultural operations, other natural and working lands, evacuation and wildfire risk, and environmentally sensitive habitat areas. The availability of groundwater supply is a major constraint to future housing development, as described in the HEU6 as well as in Section 4.10, Hydrology and Water Quality, and Section 4.18, Utilities and Service Systems. The increase in housing units under buildout of the project would increase the demand for water. Due to the undeveloped nature of several opportunity sites and the increased water demand and wastewater generation from project buildout, public utilities infrastructure (e.g., water and sewer service) would need to be installed and extended from existing infrastructure. However, the County considered sites in priority planning areas and infill when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural or undeveloped lands. The County also reduced the number of sites included in the Sites Inventory from the initial list, based on public feedback and meeting CA HCD's recommended 15 percent buffer for each income category. In addition to public utilities, the demand for other public services, such as fire and police protection and recreational facilities, is expected to increase due to buildout of the project. Impacts related to the increased demand for public services are discussed in Section 4.14, Public Services, of this PEIR.

**Table ES-2. Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.1, Aesthetics** | | | | | |
| Threshold 1: Scenic Vistas | PS | SU | Greater | Greater | Greater |
| Threshold 2: Scenic Resources Within a Scenic Highway | PS | SU | Greater | Greater | Greater |
| Threshold 3: Visual Character or Quality | PS | SU | Greater | Greater | Greater |
| Threshold 4: Light or Glare | PS | LS | Similar | Similar | Similar |
| **Section 4.2, Agriculture and Forestry Resources** | | | | | |
| Threshold 1: Conversion of Farmland to Non-Agricultural Use | PS | SU | Greater | Less | Similar |
| Threshold 2: Conflict with Zoning for Agricultural Use or Williamson Act Contract | PS | SU | Greater | Less | Similar |
| Threshold 3: Conflict with Zoning for Forest or Timberland | PS | SU | Greater | Similar | Similar |
| Threshold 4: Loss or Conversion of Forest Land to Non-Forest Use | PS | SU | Greater | Similar | Similar |
| Threshold 5: Other Changes Resulting in Conversion of Farmland or Forest Land | NI | NI | Greater | Similar | Similar |
| **Section 4.3, Air Quality** | | | | | |
| Threshold 1: Consistency with Applicable Air Quality Plan | PS | SU | Less | Similar | Similar |
| Threshold 2: Cumulative Increase in Criteria Pollutant Emissions | PS | SU | Less | Less | Less |
| Threshold 3: Sensitive Receptors | LS | LS | Less | Similar | Similar |
| Threshold 4: Odors | LS | LS | Less | Similar | Similar |
| **Section 4.4, Biological Resources** | | | | | |
| Threshold 1: Candidate, Sensitive, or Special Status Species | PS | SU | Less | Similar | Similar |
| Threshold 2: Riparian Habitat and Other Sensitive Natural Communities | PS | SU | Less | Similar | Similar |

**Table ES-2. Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| Threshold 3: State or Federally Protected Wetlands | PS | LS | Less | Similar | Similar |
| Threshold 4: Wildlife Corridors and Wildlife Nursery Sites | PS | SU | Less | Similar | Similar |
| Threshold 5: Local Policies or Ordinances Protecting Biological Resources | PS | SU | Less | Similar | Similar |
| Threshold 6: Habitat Conservation Plans and Natural Community Conservation Plans | NI | NI | Less | Similar | Similar |
| **Section 4.5, Cultural Resources** | | | | | |
| Threshold 1: Historical Resources | PS | LS | Similar | Similar | Similar |
| Threshold 2: Archaeological Resources | PS | LS | Similar | Similar | Similar |
| Threshold 3: Human Remains | LS | LS | Similar | Similar | Similar |
| **Section 4.6, Energy** | | | | | |
| Threshold 1: Wasteful or Inefficient Energy Usage | LS | LS | Less | Less | Less |
| Threshold 2: Conflict with Renewable or Energy Efficiency Plan | LS | LS | Less | Less | Less |
| **Section 4.7, Geology and Soils (Paleontological Resources)** | | | | | |
| Threshold 1: Exposure to Seismic-Related Hazards | LS | LS | Similar | Similar | Less |
| Threshold 2: Soil Erosion or Topsoil Loss | LS | LS | Similar | Similar | Similar |
| Threshold 3: Geologic Stability | LS | LS | Similar | Similar | Similar |
| Threshold 4: Expansive Soils | LS | LS | Similar | Similar | Similar |
| Threshold 5: Septic Tanks or Alternative Wastewater Disposal Systems | LS | LS | Similar | Similar | Similar |
| Threshold 6: Paleontological Resources | PS | LS | Similar | Similar | Similar |
| **Section 4.8, Greenhouse Gas Emissions** | | | | | |
| Threshold 1: Generation of Greenhouse Gas Emissions | PS | SU | Less | Less | Less |
| Threshold 2: Conflict with Applicable Plan | PS | SU | Less | Less | Less |

**Table ES-2. Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.9, Hazards and Hazardous Materials** | | | | | |
| Threshold 1: Routine Transport, Use, or Disposal of Hazardous Materials | LS | LS | Similar | Similar | Similar |
| Threshold 2: Release of Hazardous Materials | PS | LS | Similar | Similar | Similar |
| Threshold 3: Proximity to Schools | LS | LS | Similar | Similar | Similar |
| Threshold 4: Hazardous Materials Sites | PS | LS | Similar | Similar | Similar |
| Threshold 5: Airport Land Use Compatibility | LS | LS | Similar | Similar | Similar |
| Threshold 6: Emergency Response or Evacuation Plans | PS | LS | Less | Similar | Similar |
| Threshold 7: Wildland Fires | PS | LS | Similar | Similar | Similar |
| **Section 4.10, Hydrology and Water Quality** | | | | | |
| Threshold 1: Water Quality Standards | LS | LS | Similar | Similar | Similar |
| Threshold 2: Groundwater Recharge and Supplies | PS | SU | Less | Greater | Less |
| Threshold 3: Site Drainage and Hydrology | LS | LS | Similar | Similar | Similar |
| Threshold 4: Activities in Flood Hazard, Tsunami, or Seiche Zone | LS | LS | Similar | Similar | Similar |
| Threshold 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan | PS | SU | Less | Greater | Less |
| **Section 4.11, Land Use and Planning** | | | | | |
| Threshold 1: Physical Division of Established Community | LS | LS | Similar | Similar | Similar |
| Threshold 2: Conflict with Applicable Land Use Plans, Policies, and Regulations | PS | SU | Greater | Similar | Similar |
| **Section 4.12, Mineral Resources** | | | | | |
| Threshold 1: Loss of Known Mineral Resources | LS | LS | Similar | Similar | Similar |
| Threshold 2: Loss of Locally Important Mineral Resource Site | LS | LS | Similar | Similar | Similar |

**Table ES-2. Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.13, Noise** | | | | | |
| Threshold 1: Excessive Noise Levels | PS | LS | Less | Less | Less |
| Threshold 2: Excessive Groundborne Vibration | PS | LS | Less | Less | Less |
| Threshold 3: Aircraft Noise | LS | LS | Less | Similar | Similar |
| **Section 4.14, Public Services** | | | | | |
| Threshold 1: Physical Impacts from the Provision of Public Services Facilities to Maintain Performance Standards | PS | LS | Less | Similar | Similar |
| **Section 4.15, Recreation** | | | | | |
| Threshold 1: Deterioration of Existing Recreational Facilities | PS | LS | Less | Similar | Similar |
| Threshold 2: New or Expanded Recreational Facilities | PS | LS | Less | Similar | Similar |
| **Section 4.16, Transportation** | | | | | |
| Threshold 1: Circulation System Performance | LS | LS | Similar | Similar | Similar |
| Threshold 2: Induction of Substantial Vehicle Miles Traveled | PS | SU | Less | Less | Less |
| Threshold 3: Hazardous Design Features | LS | LS | Similar | Similar | Similar |
| Threshold 4: Inadequate Emergency Access | LS | LS | Similar | Greater | Greater |
| **Section 4.17, Tribal Cultural Resources** | | | | | |
| Threshold 1: Tribal Cultural Resources | PS | LS | Less | Similar | Similar |
| **Section 4.18, Utilities and Service Systems** | | | | | |
| Threshold 1: New or Expanded Utilities Facilities | PS | SU | Less | Similar | Similar |
| Threshold 2: Water Supply Availability | PS | SU | Less | Greater | Less |
| Threshold 3: Wastewater Treatment Capacity | PS | SU | Less | Similar | Similar |
| Threshold 4: Solid Waste Generation | LS | LS | Less | Similar | Similar |
| Threshold 5: Compliance with Solid Waste Regulations | LS | LS | Less | Similar | Similar |

**Table ES-2. Comparison of Potentially Significant Impacts for Alternatives to the Proposed Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.19, Wildfire** | | | | | |
| Threshold 1: Emergency Response or Evacuation Plans | PS | LS | Less | Greater | Greater |
| Threshold 2: Pollutant Concentrations | PS | LS | Similar | Similar | Similar |
| Threshold 3: Installation or Maintenance of Associated Infrastructure | PS | LS | Similar | Similar | Similar |
| Threshold 4: Flooding or Landslides | LS | LS | Similar | Similar | Similar |
| Threshold 5: Risk of Loss, Injury, or Death | PS | LS | Similar | Similar | Similar |

**Notes:** LS = Less than Significant Impact; NI = No Impact; PS = Potentially Significant Impact; SU = Significant and Unavoidable

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# Chapter 1 Introduction

The County of Monterey has prepared this Program Environmental Impact Report (PEIR) to inform the public, local community, organizations, responsible agencies, trustee agencies, and other interested public agencies about potential significant environmental effects resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project), and possible measures to mitigate those significant effects and alternatives to the project.

This PEIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), CEQA Guidelines (CEQA Guidelines, Section 15000 et seq.), and the lead agency's procedures for implementing CEQA. This EIR is a "Program EIR" pursuant to CEQA Guidelines, Section 15168. A PEIR examines the environmental impacts of a series of actions that can be characterized as one large project. This PEIR presents a regionwide assessment of the impacts of the project as contemplated by the CEQA Guidelines.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the PEIR, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 1.1 Project Overview

In accordance with CEQA Guidelines, Section 15064(d), this PEIR identifies reasonably foreseeable environmental impacts that could occur as a result of the project. When the PEIR uses the phrase "impacts of the proposed project," it refers to the reasonably foreseeable impacts that would result from those future implementation actions and development facilitated by the project.

The HEU6 is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County's assigned Regional Housing Needs Allocation (RHNA) of 3,326 housing units distributed across four income categories (1,070 extremely

low/very low-income, 700 low-income, 420 moderate-income, and 1,136 above moderate-income housing units). Pursuant to legal requirements for the Housing Element, the HEU6 identifies sites in the UMC that are suitable for the development of all housing types, with the capacity to satisfy the housing needs for the current Sixth Cycle. The Sites Inventory has the capacity for at least 4,434 housing units from opportunity sites, 1,117 housing units from pipeline sites under the proposed or existing zoning, and 346 accessory dwelling units (ADUs) without specific sites, for a combined total capacity of 5,897 housing units. Development of the pipeline sites is currently being processed by the County independently of the HEU6. ADUs are not site-specific and could also be developed independently of the HEU6 in areas zoned for single-family or multi-family residential use. As such, pipeline sites and ADUs are evaluated independently of the HEU6 and are not evaluated in this PEIR.

For the purposes of this PEIR analysis, the potential impacts focus on the physical environmental changes associated with the changes proposed as part of opportunity sites. As part of the project, the County will rezone the opportunity sites to create enough capacity to meet the RHNA target. Specifically, all opportunity sites will be rezoned to either the HDR/25 (High Density Residential at 25 dwelling units per acre) or HDR/30 (High Density Residential at 30 dwelling units per acre). Refer to Section 3.5.2, Rezoning and Split Zoning, in Chapter 3 and Project Impacts and Mitigation in Chapter 4, Environmental Analysis, for further information on the buildout capacity and development assumptions used in the impact analyses of this PEIR.

Along with facilitating the County's RHNA, the update to the Housing Element must identify and analyze significant disparities in access to opportunity (Assembly Bill 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities. The HEU6 establishes programs, policies, and actions to further the goal of meeting the existing and projected housing needs for residents of all income levels throughout the UMC. The HEU6 explains processes by which the County proposes to accommodate the RHNA assigned to the County for the 8-year planning period from 2023 to 2031.

To implement the HEU6, the County proposes to amend the Monterey County General Plan (2010 General Plan), applicable Land Use Plans (LUPs) and Coastal Implementation Plans of the County's Local Coastal Program (LCP), Monterey County Zoning Code (Title 20, Coastal Zone, and Title 21, Inland Areas), and other necessary components to implement the HEU6 and comply with state law. Updates to the 2010 General Plan include amendments to the Circulation Element, Conservation and Open Space Element, Land Use Element, Public Services Element, Carmel Valley Master Plan, Central Salinas Valley Area Plan, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, Greater Salinas Area Plan, North County Area Plan, Toro Area Plan, and to

LCP components, including the Carmel Area LUP and North County LUP (refer to Appendix B for a non-exhaustive list of plans and policies that need to be modified as part of the project).

The project also includes consideration of a by-right housing ordinance to facilitate by-right uses under HEU6 implementation programs (H-2.D, H-2.H, and H-3.A) and other future state law that requires by-right housing programs. The by-right housing ordinance would include objective design standards and environmental protection measures to facilitate one of two streamlined processing pathways for future qualifying (i.e., by-right housing) projects. Refer to Section 3.7.3, By-Right Development, and Section 3.7.4, Streamlined Review, for further information regarding the by-right development allowed under HEU6 implementation programs (H-2.D, H-2.H, and H-3.A) and the two streamlined processing pathways for future residential development processing under the HEU6. Refer to Section 3.7.5, By-Right Housing Ordinance, for further discussion of the ordinance.

## 1.2 Statement of Purpose

This PEIR has been prepared in compliance with the CEQA Statutes and Guidelines (refer to CEQA Guidelines, Section 15121[a]). In general, the purpose of an EIR is:

- To satisfy the requirements of CEQA, pursuant to California Public Resources Code, Section 21080.
- To inform the public, local community, organizations, and responsible, trustee, and other interested public agencies of the nature of the project, its potentially significant environmental effects, its potentially feasible measures to mitigate those impacts, and the reasonable potentially feasible alternatives to the project.
- For consideration by responsible agencies in issuing permits and approvals for the development that would occur from the implementation of the project.

CEQA and the CEQA Guidelines require the decision-making agency to balance, as applicable, the economic, social, technological, legal, or other benefits of a project against its unavoidable environmental risks when determining whether to approve a project. This PEIR is an informational document, the purpose of which is to identify the potentially significant effects of the project on the environment and to indicate the manner in which those significant effects can be avoided or reduced to a less than significant level, to identify any significant and unavoidable adverse impacts that cannot be mitigated to below a level of significance, and to identify reasonable and potentially feasible alternatives to the project that would avoid or substantially lessen any significant, adverse environmental effects associated with the project.

The CEQA lead agency (i.e., the County of Monterey) is required to consider the information in this PEIR and any other relevant information in the administrative record in making its decision on the project. This PEIR does not determine the ultimate decision that will be made regarding the

project. CEQA requires the County to consider the information in this PEIR before approving the project and to make Findings of Fact regarding each significant effect identified in this PEIR.

This PEIR will be circulated to responsible and trustee agencies with jurisdiction over resources affected by the project, including local, state, and federal agencies, and interested parties and individuals. In reviewing this PEIR, reviewers should focus on the sufficiency of the document in identifying and analyzing potentially significant effects on the environment and avoiding or mitigating the significant effects of the project.

This PEIR will be used by County to evaluate the environmental implications of adopting the project. If certified, this PEIR will be relied on by agencies with permitting or approval authority over the project.

## 1.3 Type of Environmental Document

This document is a PEIR. CEQA Guidelines, Section 15168(a), states the following definition of a PEIR:

> A PEIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria, to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

This PEIR provides a regionwide assessment of the project's impacts. Site-specific impact analysis for individual projects is not required in a PEIR unless program components are sufficiently detailed. Individual projects on opportunity sites are not yet defined to a degree that allows for such analysis. The County is required to review and conduct specific environmental analyses for individual projects as needed before their approval. This PEIR serves as a first-tier CEQA document to support second-tier environmental reviews, if necessary, for development facilitated by the project on any of the 56 opportunity sites (refer to Section 3.7, Intended Uses of the Program Environmental Impact Report).

Applicants proposing subsequent projects may require additional environmental review based on the findings of this PEIR and the requirements of its mitigation measures. When additional environmental documentation is needed, project applicants can reference relevant information from this PEIR, including analyses of secondary effects, cumulative impacts, broad alternatives, and other applicable factors.

If the County determines that a later activity would not result in new impacts and no additional mitigation measures are necessary, the activity will not require further CEQA review, and a

consistency finding will be prepared. For cases where additional environmental review is required, the analysis will focus on significant impacts specific to the project or site that were not addressed in this PEIR (refer to Section 3.7.7, Findings for Future Residential Projects).

CEQA Guidelines, Section 15151, states the following standards for adequacy of an EIR:

> An Environmental Impact Report should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

CEQA Guidelines, Section 15146, states the following degree of specificity requirements in an EIR:

> (a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.
>
> (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption, or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

## 1.4 Lead, Responsible, and Trustee Agencies

### 1.4.1 Lead Agency

In accordance with CEQA Guidelines, Sections 15050 through 15053 and 15367, the County of Monterey is the designated lead agency, which is defined as the "public agency which has the principal responsibility for carrying out or approving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the EIR, and responding to comments received on the Draft PEIR. Before deciding to approve a project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, the decision-making body has reviewed and considered the information in the EIR, and the EIR reflects the independent judgment of the lead agency.

## 1.5 Program Environmental Impact Report Review Process

### 1.5.1 Notice of Preparation

In accordance with CEQA Guidelines, Section 15082, a Notice of Preparation (NOP) was circulated for public and public agency review from October 21, 2024, through November 20, 2024 (included as Appendix A). The purpose of the NOP is to provide notification that an EIR for the project is being prepared and to solicit guidance on the scope and content of the document.

Pursuant to CEQA Guidelines, Section 15082, the lead agency held a public scoping meeting on November 7, 2024. Public agencies and members of the public were invited to attend and provide input on the scope of this PEIR. Comments from the public and public agencies in response to the NOP are provided in Appendix A. General concerns and issues raised in response to the NOP are summarized in the Executive Summary and addressed in this PEIR.

### 1.5.2 Draft Program Environmental Impact Report and Public Review

Pursuant to CEQA Guidelines, Section 15105, this PEIR is being circulated for public review and comment for a period of 45 days. During this period, the public and public agencies can submit comments on this PEIR's accuracy and completeness to the lead agency. The 45-day public review period for this PEIR will be from July 17, 2026, through August 31, 2026.[1] The public can review this PEIR by request at the following address during normal business hours (Monday through Friday, 8:00 a.m. to 4:00 p.m.) or on the County's website:

County of Monterey
Housing & Community Development Department
1441 Schilling Place, South 2nd Floor
Salinas, California 93901

https://www.countyofmonterey.gov/government/departments-a-h/housing-community-development/planning-services/current-planning/general-info/recent-environmental-documents

[1] The Notice of Availability published in the Monterey County Weekly (dated July 17, 2026) stated that impacts related to Biological Resources were less than significant with mitigation incorporated. This was erroneous. The Notice of Availability provided to the CEQA State Clearinghouse has been updated to note that impacts related to Biological Resources are significant and unavoidable, as described in this Section of the PEIR.

(Environmental Documents Webpage) or https://www.countyofmonterey.gov/GeneralPlanUpdates (Project Webpage)

The County encourages all comments on this PEIR to be submitted in writing. Comments or questions regarding this PEIR should be addressed to the following:

Sarah Wikle, Principal Planner
County of Monterey
Housing & Community Development Department
1441 Schilling Place, South 2nd Floor
Salinas, California 93901
CEQAcomments@CountyofMonterey.gov

### 1.5.3 Final Program Environmental Impact Report and Certification

Upon completion of the Draft PEIR public review period, a Final PEIR will be prepared. Pursuant to CEQA Guidelines, Section 15132, the Final PEIR will consist of (1) the Draft PEIR; (2) the comments and recommendations received on the Draft PEIR; (3) a list of people, organizations, and public agencies that commented on the Draft PEIR; (4) the County's responses to significant environmental points raised by the public and agency comments submitted during the review and consultation process; and (5) any other information the County has added to the Draft PEIR. The Final PEIR will also include a Mitigation Monitoring and Reporting Program prepared in accordance with CEQA (California Public Resources Code, Section 21081.6). The Final PEIR will address any revisions to the Draft PEIR made in response to public or public agency comments. These components will compose the Final PEIR for the project. Before the County's Board of Supervisors can review the project for approval, it must first certify that the PEIR has been completed in compliance with CEQA, that it has reviewed and considered the information in the PEIR, and that the PEIR reflects the independent judgment of the County. The County will also be required to adopt Findings of Fact and a Statement of Overriding Considerations for significant, unavoidable impacts identified in this PEIR.

## 1.6 Documents Incorporated by Reference

CEQA Guidelines, Section 15150, allows for incorporation by reference of "all or portions of another document which is a matter of public record or is generally available to the public." Incorporation by reference is used principally as a means of reducing the size of EIRs. This PEIR relies in part on data, environmental evaluations, mitigation measures, and other components of the 2010 General Plan and Final EIR (for inland areas of the UMC); area and master plans, including the Carmel Valley Master Plan, Central Salinas Valley Area Plan, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, Greater Salinas Area Plan, North County Area Plan (Inland), South County Area Plan, and Toro Area Plan; 1982 General Plan (for coastal areas of the UMC); two LCP components, including the Carmel Area LUP and North County LUP and

associated Coastal Implementation Plans; the Monterey County Code; and the County's Multi-Jurisdictional Hazard Mitigation Plan, prepared by the County for areas in Monterey County. These documents are used as source documents for this PEIR. These documents are available for public review online:

https://www.countyofmonterey.gov/government/departments-a-h/housing-community-development/planning-services/current-planning/land-use-regulations-11559

## 1.7 Scope of the Program Environmental Impact Report

Based on a review of the project and comments received during the NOP public review period, the County determined that a PEIR that addresses the following environmental issue areas should be prepared:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (Paleontological Resources)
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The specific topics evaluated are detailed in Chapter 4 of this PEIR. Various topics may be covered in Chapter 7, Effects Found Not to Be Significant, if the topic's analysis determined that environmental effects would be less than significant.

This PEIR evaluates direct impacts, reasonably foreseeable indirect impacts, and cumulative impacts resulting from the project using the most current information available and in accordance with the provisions set forth in CEQA and the CEQA Guidelines. In addition, this PEIR recommends potentially feasible mitigation measures, where possible, and project alternatives that would reduce or eliminate significant, adverse environmental effects.

Chapter 6, Alternatives, of this PEIR was prepared in accordance with Section 15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would

otherwise occur. However, project modification or alternatives are not required where significant environmental impacts would not occur.

This PEIR evaluates the following alternatives to the project:

- **Alternative 1: No Project Alternative.** Under the No Project Alternative, the project would not be implemented.
- **Alternative 2: Agricultural Preservation Alternative.** This alternative would remove selected opportunity sites that are currently zoned for farmland (i.e., F/40) or used for agricultural activities to reduce the significant and unavoidable impact on agriculture and forestry resources as described in Section 4.2, Agricultural and Forestry Resources.
- **Alternative 3: Water Conservation Alternative.** This alternative would remove selected opportunity sites within critically over-drafted groundwater basins to reduce significant and unavoidable impacts on groundwater recharge and supplies as described in Section 4.10, Hydrology and Water Quality, and significant and unavoidable impacts on future water supply as described in Section 4.18, Utilities and Service Systems.

## 1.8 Organization of the Program Environmental Impact Report

This PEIR is organized into three parts: (1) the Draft PEIR addresses the potential environmental impacts of the physical development of the project; (2) associated technical appendices; and (3) when the PEIR is finalized, the Final PEIR will contain the public, organization, and public agency comments received on the Draft PEIR, the County's responses to those comments, a summary of PEIR revisions or enhancements, and the Mitigation Monitoring and Reporting Program for the project.

This PEIR includes the following:

**Executive Summary.** Summarizes the project, environmental impacts that would result from implementation of the project, proposed mitigation measures that would avoid or reduce impacts, and the level of significance of impacts both before and after mitigation.

**Chapter 1, Introduction**. Provides an introduction and overview of this PEIR process and describes the scope of this PEIR and the review process.

**Chapter 2, Environmental Setting.** Describes the baseline regional setting, land use and zoning setting of the opportunity sites, and the environmental setting.

**Chapter 3, Project Description**. Provides a detailed description of the project, including background information on the legal requirements for housing elements and the RHNA; project objectives; inventory or sites included in the HEU6; discretionary actions included as part of the project; and intended uses for this PEIR.

**Chapter 4, Environmental Analysis**. Describes the scope of the environmental impacts analysis and provides an assessment of potential project impacts for each environmental issue area presented. Each section is divided into seven sections: Regulatory Setting, Environmental Setting, Method of Analysis, Thresholds of Significance, Project Impacts and Mitigation, Cumulative Impacts, and Conclusion.

**Chapter 5, Other CEQA Considerations**. Provides information required by CEQA regarding impacts that would result from the project, including a summary of secondary impacts, such as potential impacts resulting from growth inducement, and significant, irreversible changes to the environment.

**Chapter 6, Alternatives**. Describes and compares the proposed alternatives to the project.

**Chapter 7, Effects Found Not to Be Significant.** Describes and evaluates the environmental topics concluded to be clearly less than significant and/or unlikely to occur.

**Chapter 8, List of Preparers**. Lists the lead agency and consultants who provided technical assistance in the preparation and review of this PEIR.

**Chapter 9, References**. Provides a list of references used in preparation of the analysis presented in this PEIR.

**Appendices**. Includes various documents and data that support the analysis presented in this PEIR.

# Chapter 2 Environmental Setting

The purpose of this chapter is to provide an overview of the regional and local environmental setting for the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project), as described in Chapter 3, Project Description.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 2.1 Regional Setting

Monterey County is one of the largest counties in the State of California, covering over 3,300 square miles comprising a variety of natural habitats and residential communities. Monterey County is on the north-central coast of California, bordered by Santa Cruz County to the north; San Benito, Fresno, and King Counties to the east; San Luis Obispo County to the south; and the Pacific Ocean to the west. Figure 2-1, Regional Location, depicts the Monterey County in a regional context. Monterey County is roughly 141 miles north of San Luis Obispo and 106 miles south of San Francisco. The general topography varies throughout Monterey County and includes coastal bluffs, mountain ranges, and valleys.

The UMC encompasses a diverse and expansive landscape that includes agricultural lands, coastal bluffs, inland valleys, mountain ranges, rural communities, and protected natural areas, encompassing approximately 98 percent of Monterey County's geographic area. There are 12 incorporated cities in Monterey County making up approximately 75 percent of Monterey County's population but the incorporated cities make up only roughly 2 percent of the total Monterey County land area (LAFCO 2026). These cities are generally classified as either valley

or peninsula. There are five valley cities consisting of Gonzales, Greenfield, King City, Salinas (County seat), and Soledad. The seven peninsula cities consist of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, and Seaside.

## 2.2 Rezoning Sites and Setting

The HEU6 area encompasses all of the UMC, the geographic area overseen by the County and covered by the HEU6. Regional access to Monterey County is provided by the U.S. Route 101 traveling north–south and State Route (SR-) 198 and SR-146 running east–west. SR-1 also provides regional access along the Pacific coastline and SR-218, SR-68, and SR-183 are other major roadways serving Monterey County.

UMC is largely divided into 11 primary planning areas categorized as either Coastal or Inland with Areas Plans (APs) developed for Inland areas and Land Use Plans (LUPs) developed for Coastal areas governed by the County's Local Coastal Program (LCP). There are seven planning areas in the Inland areas of UMC: North County AP, Greater Salinas AP, Central Salinas Valley AP, Greater Monterey Peninsula AP, Toro AP, Cachagua AP, and South County AP. Additionally, two master plans have been adopted within the Greater Monterey Peninsula Area Plan, the Carmel Valley Master Plan and the Fort Ord Master Plan. The County's LCP consists of four LUPs: North County LUP, Del Monte Forest LUP, Carmel Area LUP, and Big Sur LUP. The County's adopted Community Plans include the Castroville Community Plan and the Moss Landing Community Plan. Most of this development is concentrated in the northern one-third of UMC, while small rural communities and active agricultural fields characterize the population and development in the rest of UMC.

The 56 opportunity sites in nine planning areas of UMC and one incorporated city are shown on Figures 2-2a through 2-2i: Project Location – Opportunity Sites in the Carmel Area Land Use Plan, Carmel Valley Master Plan, Central Salinas Valley Area Plan, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, Greater Salinas Area Plan, North County Land Use Plan (Coastal), North County Area Plan (Inland), Toro Area Plan, and the City of Marina. Each opportunity site has been assigned a number (i.e., Opportunity Site Number).

- Carmel Area LUP Opportunity Sites: 16, 43
- Carmel Valley Master Plan Opportunity Sites: 17 through 23, 35 through 38, 54 through 56
- Central Salinas Valley AP Opportunity Sites: 25 through 29, 32 through 34, 42
- Fort Ord Master Plan Opportunity Sites: 31, 47
- Greater Monterey Peninsula AP Opportunity Sites: 40, 45, 46, 52
- Greater Salinas AP Opportunity Sites: 1 through 6
- North County LUP (Coastal) Opportunity Site: 48

- North County AP (Inland) Opportunity Sites: 8 through 15, 30, 39, 41, 44, 49, 50, 51, 64
  - Includes sites located in the Castroville Community Plan Area
- Toro AP Opportunity Site: 24
- City of Marina Opportunity Site: 53

The HEU6 does not specify sites for accessory dwelling units, and since development of pipeline sites is not dependent upon the outcome of the HEU6, pipeline site locations (shown in green as "entitled/proposed") are shown on Figures 2-2a through 2-2i for informational purposes only.

### 2.2.1 Existing Land Uses

The 56 opportunity sites are located throughout the UMC with the exception of Opportunity Site 53, which is in the incorporated limits of the City of Marina. The 56 opportunity sites comprise approximately 586 acres of total site acres, of which only approximately 446 acres are proposed to be rezoned due to split zoning on some opportunity sites. The current land use, zoning designation, and existing uses are identified in Table 2-1, Existing Zoning and Uses for Opportunity Sites.

Of the 56 opportunity sites, the HEU6 categorizes 20 as vacant and 36 as non-vacant, which also includes sites that are designated for agricultural uses (refer to Table 2-2, Existing Zoning and Vacant/Non-Vacant Summary). Additionally, although only 20 sites are categorized as vacant, six other sites include vacant portions within non-vacant parcels developed with various uses. While only three sites are currently zoned for farmland, ten opportunity sites or portions of the opportunity sites are presently being used for farmland or agricultural purposes. Other existing uses include seven residential sites; seven sites developed with commercial, industrial, or office uses; two sites with paved parking or storage lots; one site with recreation fields; and three sites with institutional uses. These uses are described in Table 2-1.

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 1 | Russell Road Farmland/ 113-161-018-000 | 95.31/95.31 | GSAP/Farmland | F-40 | Farmland. Farming row crops – located in the Bolsa Knolls neighborhood. |
| 2 | 55 Russell Road, Salinas/ 113-161-019-000 | 10.68/10.68 | GSAP/Farmland | F-40 | Farmland. Residential uses at the front end of parcel that's not part of the developable acreage. Located in the Bolsa Knolls neighborhood. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 3 | 59 Russell Road/ 113-161-012-000 | 8.33/8.33 | GSAP/Residential – Medium Density 1–5 Units/Acre | MDR/5 | Farmland. Two residential units at the front portion of the parcel that are not part of the developable acreage. Located in the Bolsa Knolls neighborhood. |
| 4 | 368 San Juan Grade Road/ 211-012-034-000 | 12.24/12.24 | GSAP/Public/Quasi-Public | PQP | Vacant portion of the Salinas Valley Church parcel. Located in the Bolsa Knolls neighborhood. |
| 5 | 442 Boronda Road/ 261-101-006-000 | 4.04/4.04 | GSAP/Residential – Medium Density 1–5 Units/Acre | MDR/4-A-UR | Vacant portion of the parcel with one housing unit on the southwest corner of the parcel. Located in the community of Boronda. |
| 6 | Boronda Road/ 261-101-002-000 | 1.54/1.54 | GSAP/Residential – Medium Density 1–5 Units/Acre | MDR/4-A-UR | Non-residential structures along the eastern edge of the lot. Located in the community of Boronda, along the western edge of the City of Salinas. |
| 8 | El Camino Real North/ 125-501-002-000 | 4.25/4.25 | NCAP (Inland)/Residential – Low Density 5–1 Acres/Unit | LDR/2.5 | Vacant. Located in the community of Prundale. |
| 9 | 1060 North El Camino Real/ 125-171-029-000 | 4.09/4.09 | NCAP (Inland)/Public/ Quasi-Public | PQP | Vacant. Located in the community of Prundale. |
| 10 | El Camino Real North/ 125-171-047-000 | 7.01/6.09 | NCAP (Inland)/ Commercial | LC | Vacant portion of the parcel developed with a shopping center. Commercial shopping center at the southwest corner of parcel. Located in the community of Prunedale. |
| 11 | 10298 Tembladera Street #A7/ 030-141-029-000 | 1.80/1.46 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Vacant. The vacant site is adjacent to the Bella Vista Apartment along the Tembladero Slough in the community of Castroville. |
| 12 | 10380 Merritt/ 030-151-008-000 | 0.73/0.62 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Vacant. This undeveloped site is adjacent to the Bella Vista Apartments in the community of Castroville. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 13 | 10698 Tembladera Street/ 030-155-005-000 | 0.79/0.64 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Paved lot used by Central Coast Storage being used for parking and storage. No structural improvement. Located in the community of Castroville. |
| 14 | Poole Street/ 030-171-001-000 | 1.54/1.13 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Vacant except a detached garage on the northern section of parcel. The Tembladero Slough runs along the south edge of the parcel in the community of Castroville. |
| 15 | Union Street/ 030-171-015-000 | 2.35/1.82 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Vacant. Adjacent to the Castroville Station shopping center and residential development in the community of Castroville. |
| 16 | 24945 Valley Way/ 009-061-003-000, 009-061-005-000, 009-061-010-000, 009-061-013-000, 009-061-014-000, 009-061-015-000, 009-061-016-000 | 4.45/4.45 | CLUP – CALUP/Residential – Medium Density | MDR/2-D (CZ) | Abandoned convalescent home. Located in UMC near Carmel-by-the-Sea. |
| 17 | Rio Road/ 009-562-015-000, 009-562-016-000, 009-562-002-000 | 3.51/3.51 | CVMP/Commercial | LC-D-S-RAZ | Vacant. Located in the community of Mouth of Valley, Carmel Valley. |
| 18 | 26340 Val Verde Drive/ 015-021-026-000 | 2.67/2.67 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Vacant portion of the parcel with one residential use on east side of parcel. Located in the community of Mouth of Valley, Carmel Valley. |
| 19 | 26380 Val Verde Drive/ 015-021-025-000 | 2.63/2.63 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Vacant portion of a parcel with a residential unit on the eastern half of the parcel. Located in the community of Mouth of Valley, Carmel Valley. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 20 | Carmel Valley Road (near the Carmel Rancho Shopping Center along Val Verde Drive)/ 015-021-015-000 | 5.33/5.33 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Agricultural use. Located in the community of Mouth of Valley, Carmel Valley. |
| 21 | Carmel Valley Road (just south of Site 20)/ 015-021-021-000, 015-021-020-000, 015-021-049-000 | 2.83/2.83 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Agricultural use. Located in the community of Mouth of Valley, Carmel Valley. |
| 22 | Carmel Valley Road (just east of the Carmel Rancho Shopping Center along Val Verde Drive)/ 015-021-004-000 | 6.25/6.25 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Agricultural use. Located in the community of Mouth of Valley, Carmel Valley. |
| 23 | Dorris Drive/ 169-235-009-000, 169-235-010-000, 169-235-011-000, 169-235-012-000 | 0.48/0.48 | CVMP/Planned Commercial | LC-D-S | Vacant. Located in the community of Mid Valley, Carmel Valley. |
| 24 | 18900 Portola Drive/ 161-011-074-000 | 31.53/31.53 | TAP/Mixed-Use | MU/15-D | Agricultural (Merrill Farms). Located east of Highway 68 at the intersection of Reservation Road and Highway 68 in the Toro Area Plan. |
| 25 | Lincoln Street/ 145-151-001-000 | 5.66/5.66 | CSVAP/ Public/Quasi-Public | PQP | Agricultural use. Located in the community of Chualar. |
| 26 | Jefferson Street/ 145-161-085-000 | 1.17/1.17 | CSVAP/ Residential – High Density 5–20 Units | HDR/10 | Agricultural use. Located in the community of Chualar. |
| 27 | Washington Street/ 145-161-086-000 | 1.36/1.36 | CSVAP/ Residential – High Density 5–20 Units | HDR/10 | Vacant. Located in the community of Chualar. |
| 28 | Grant Street/ 145-161-087-000 | 3.43/3.43 | CSVAP/ Residential – High Density 5–20 Units | HDR/10 | Vacant. Located in the community of Chualar |
| 29 | Grant Street/ 145-161-088-000 | 0.99/0.99 | CSVAP/ Residential – High Density 5–20 Units | HDR/10 | Vacant. Located in the community of Chualar. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 30 | 11241 Moro Cojo Street/ 030-191-011-000 | 3.63/3.63 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Housing units located on the northeast corner of the site. Located in the community of Castroville. |
| 31 | Bunker Hill Drive/ 031-101-016-000 | 13.04/13.04 | FOMP/School/ University(Fort Ord Master Plan) | PQP-D-S | Vacant. Located in the northern Fort Ord area close to the City of Marina. |
| 32 | San Benito Street/ 231-024-005-000, 231-024-011-000, 231-024-010-000, 231-024-006-000, 231-024-007-000, 231-024-001-000 | 1.56/1.56 | CSVAP/ Residential – High Density 5–20 Units/Acre | HDR/5 | Vacant. Located in the community of San Lucas. |
| 33 | San Benito Street/ 231-038-014-000, 231-038-012-000, 231-038-010-000 | 0.41/0.41 | CSVAP/ Residential – Low Density 5–1 Acres/Unit | LDR/1 | Vacant. Located in the community of San Lucas. |
| 34 | San Benito Street/ 231-038-013-000, 231-038-011-000 | 0.27/0.27 | CSVAP/ Residential – Low Density 5–1 Acres/Unit | LDR/1 | Vacant, Located in the community of San Lucas. |
| 35 | Carmel Ranch Road/ 015-012-072-000 | 3.93/3.93 | CVMP/Planned Commercial/Public /Quasi-Public (Split Land Use) | VO-B-6-D-S-RAZ | Parking lot. Located in the community of Mouth of Valley, Carmel Valley. |
| 36 | Berwick Drive/ 169-231-002-000, 169-231-003-000, 169-231-004-000, 169-231-005-000, 169-231-006-000 | 1.22/1.22 | CVMP/Commercial | HC-D-S-RAZ | Commercial buildings on site – Shopping structures and parking. Located in the community of Mid Valley, Carmel Valley. |
| 37 | Val Verde Lot, Carmel/ 015-021-003-000 | 6.21/6.21 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ | Two housing units in southwest corner or property. Located in the community of Mouth of Valley, Carmel Valley. |
| 38 | 8065 Carmel Valley Road/ 169-031-018-000 | 4.79/3.29 | CVMP/Public/ Quasi-Public | PQP-D-S-RAZ | Church development in southwest corner. Located in the community of Mid Valley, Carmel Valley. |
| 39 | 8951 Oak Road/125-171-055-000 | 0.53/0.53 | NCAP (Inland)/ Residential – Low Density 5–1 Acres/Unit | LDR/1 | Vacant. Located in the community of Prunedale. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 40 | Aguajito Road/ 008-151-002-000 | 26.78/26.78 | GMPAP/ Residential – Rural Density 5 Acres+/Unit | RDR/5.1-UR-D-S | Vacant. Located in the Aguajito/Jack Peak area. |
| 41 | Cojo Street/ 030-191-001-000 | 0.62/0.62 | NCAP (Inland)/Mixed-Use (2007 Castroville CP) | CCP (MU-C) | Vacant. Located in the community of Castroville. |
| 42 | Hall Circle/ 221-155-021-000 | 2.63/2.63 | CSVAP/Residential – High Density 5–20 Units/Acre | HDR/8-UR | Vacant. Located in the community of Pine Canyon. |
| 43 | 24735 Pescadero Road/ 009-111-005-000 | 1.57/1.46 | CLUP – CALUP/Residential – Medium Density | MDR/2-D (CZ) | Low Density Residential – The site has a residential development in the southeast corner of the parcel along with ancillary structures. Parcel is owned by the Stevenson School, which is directly adjacent to the south. Located in UMC near Carmel-by-the-Sea. |
| 44 | El Camino Real North/ 127-012-039-000 | 14.52/8.50 | NCAP (Inland)/ Commercial | LC | Commercial development on portion of site. Most of the site is vacant. Located in the community of Prunedale. |
| 45 | 490 Aguajito Road/ 008-141-002-000, 008-141-014-000 | 4.62/2.97 | GMPAP/Public/ Quasi-Public/Residential – Rural Density 5 Acres+/Unit (2 Parcels) | RDR/5.1-UR-D-S | Unitarian Universalist Church. Located in the Aguajito/Jack Peak area. |
| 46 | 9501 York Road School/ 173-071-008-000 | 19.59/4.00 | GMPAP/Public/ Quasi-Public | PQP-D-S | Vacant portion of the York School, a private education institution. No improvements except a baseball field at the northeast corner. Located in the Greater Monterey Peninsula AP. |
| 47 | South Boundary Road/ 031-131-006-000 | 98.40/15.00 | FOMP/Open Space Recreation (Fort Ord Master Plan) | PQP-D-S | Recreational sports fields (soccer field, football field, and track) and undeveloped areas. East of the Monterey Regional Airport, owned by York School. Located in the southern boundary of Fort Ord. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 48 | 100 Sill Road/ 412-073-015-000 | 16.09/16.09 | CLUP – NCLUP (Coastal)/ Residential – Medium Density 1–4 Units/Acre (Special Treatment Area) | MDR/4 (CZ) | Agricultural and residential uses. Located in the community of Las Lomas. |
| 49 | 417 Salinas Road #A/ 117-291-008-000 | 2.98/2.98 | NCAP (Inland)/Industrial (Pajaro General Plan Community Area) | HI | Developed with industrial buildings. Located in the community of Pajaro. |
| 50 | 303 Salinas Road/ 117-291-040-000 | 4.84/4.84 | NCAP (Inland)/Industrial (Pajaro General Plan Community Area) | HI | Developed with industrial buildings. Located in the community of Pajaro. |
| 51 | 70-80 Porter Drive/ 117-332-015-000, 117-332-014-000 | 0.69/0.69 | NCAP (Inland)/ Commercial (Pajaro General Plan Community Area) | HC | Comprised of two parcels that are developed with commercial buildings with approximately two existing units on the second floor. Located in the community of Pajaro. |
| 52 | Olmstead Road (Tarpy Flats)/ 259-011-064-000, 259-011-072-000 | 69.87/43.00 | GMPAP/Resource Conservation | RC/10-UR-D-S | Vacant – South of the Monterey Regional Airport Vacant, open space often referred to as Tarpy Flats. Within the Monterey Peninsula Airport Land Vicinity Affordable Housing Overlay. Located in UMC near the City of Monterey. |
| 53 | 8th Street in City of Marina/ 031-101-018-000 | 47.52/47.52 | City of Marina City Limits | C-R (City of Marina) (Commercial/ Multiple-Family Residential) | Vacant. East of California State University Monterey Bay. The site is in the City of Marina. Owned by The Regents of the UC. |
| 54 | 3785 Via Nona Marie/ 015-012-070-000 | 1.30/1.30 | CVMP/Visitor Accommodations/ Professional Offices | VO-B-6-D-S-RAZ | Bank/office space development. Located in the community of Mouth of Valley, Carmel Valley. |

**Table 2-1. Existing Zoning and Uses for Opportunity Sites**

| Site No. | Location/ APN | Site Acreage/ Rezone to HDR Acreage | Planning Area/Current Land Use | Current Zoning | Existing Use |
|---|---|---|---|---|---|
| 55 | 10 Flight Road/ 187-442-010-000, 187-442-011-000, 187-442-012-000 | 4.32/4.32 | CVMP/Visitor Accommodations/ Professional Offices And Residential – Low Density 5–1 Acres/Unit | VO-D-S-RAZ, 30-foot set back from Carmel Valley Road per CV Village Development Criteria (3.1) and LDR/1-D-S-RAZ | Blue Sky Lodge and residential development. Located in the community of Carmel Valley Village. |
| 56 | Center Street/ 169-131-025-000 | 5.82/2.12 | CVMP/Residential – Low Density 5–1 Acres/Unit | LDR/1-D-S-RAZ, LDR/B-6-D-S-RAZ, to be retained as one building site pursuant to CVMP Figure 2. | One residential unit. Located in the community of Mid Valley, Carmel Valley. |
| 64 | 29 San Juan Road/ 117-361-004-000 | 0.81/0.81 | NCAP (Inland)/ Commercial (Pajaro General Plan Community Area) | LC | 15 multi-family residential units on site. Currently out of compliance with zoning. Located in the community of Pajaro. |
| | **Total** | **585.55/444.25** | — | — | — |

**Notes:** APN = Assessor's Parcel Number; B = Building Site; C = Commercial; CCP = Castroville Community Plan; CGC (CZ) = Coastal General Commercial (Coastal Zone); CVMP = Carmel Valley Master Plan; CSVAP = Central Salinas Valley Area Plan; FOMP = Fort Ord Master Plan; GMPAP = Greater Monterey Peninsula Area Plan; GSAP = Greater Salinas Area Plan; NCAP (Inland) = North County Area Plan (Inland); NCLUP (Coastal) = North County Land Use Plan (Coastal); CALUP = Carmel Area Land Use Plan; CLUP = Coastal Land Use Plan; TAP = Toro Area Plan; D = Design Control; F = Farmlands; HC = Heavy Commercial; HDR = High Density Residential; HI = Heavy Industrial; LC = Light Commercial; LDR = Low Density Residential; MDR = Medium Density Residential; MU = Mixed Use; PQP = Public/Quasi-Public; RAZ = Residential Allocation; RDR = Rural Density Residential; S = Site Plan Review; UR = Urban Reserve; VO = Visitor Serving/Professional Office; VS = Visual Sensitivity

**Table 2-2. Existing Zoning and Vacant/Non-Vacant Summary**

| Current Zoning | Site Count | Opportunity Sites | Site Acreage/ Rezone to HDR Acreage | Current Max Density |
|---|---|---|---|---|
| **Vacant** | | | | |
| High Density Residential (HDR) | 5 | 27, 28, 29, 32, 42 | 9.97/9.97 | 5–10 du/ac |
| Low Density Residential (LDR) | 4 | 8, 33, 34, 39 | 5.46/5.46 | 1–2.5 ac/du |
| Rural Density Residential (RDR) | 1 | 40 | 26.78/26.78 | 5–10 ac/du |
| Resource Conservation (RC) | 1 | 52 | 69.87/43.00 | 10 ac/du |
| Light Commercial (LC) | 2 | 17, 23 | 3.99/3.99 | No metric |
| Commercial/Multiple-Family Residential (C-R) – City of Marina | 1 | 53 | 47.52/47.52 | 25 du/ac |
| Public/Quasi-Public (PQP) | 1 | 9 | 4.09/4.09 | No metric |

**Table 2-2. Existing Zoning and Vacant/Non-Vacant Summary**

| Current Zoning | Site Count | Opportunity Sites | Site Acreage/ Rezone to HDR Acreage | Current Max Density |
|---|---|---|---|---|
| Public/Quasi-Public (PQP) (Fort Ord Master Plan) | 1 | 31 | 13.04/13.04 | MU up to 20 du/ac |
| Castroville Community Plan | 4 | 11, 12, 15, 41 | 5.05/4.52 | MU up to 30 du/ac |
| **Total Vacant** | **20** | **—** | **186.22/158.37** | **—** |
| **Non-Vacant (Includes Farmland)** | | | | |
| High Density Residential (HDR) | 1 | 26 | 1.17/1.17 | 6 du/ac |
| Medium Density Residential (MDR) | 6 | 3, 5, 6, 16, 43, 48 | 36.02/35.91 | 2–6 du/ac |
| Low Density Residential (LDR) | 7 | 18, 19, 20, 21, 22, 37, 56 | 31.74/28.04 | 1–8 ac/du |
| Rural Density Residential (RDR) | 1 | 45 | 4.62/2.97 | 5.1 ac/du |
| Farmlands (F) | 2 | 1, 2 | 105.99/105.99 | 40 ac/du |
| Light Commercial (LC) | 3 | 10, 44, 64 | 22.34/15.40 | No metric |
| Heavy Commercial (HC) | 2 | 36, 51 | 1.91/1.91 | No metric |
| Heavy Industrial (HI) | 2 | 49, 50 | 7.82/7.82 | No metric |
| Public/Quasi-Public (PQP) | 5 | 4, 25, 38, 46, 47 | 140.68/40.19 | No metric |
| Visitor Serving/Professional Office (VO) | 2 | 35, 54 | 5.23/5.23 | No metric |
| Visitor Serving/Professional Office and Low Density Residential (VO-LDR) | 1 | 55 | 4.32/4.32 | 1–8 ac/du |
| Mixed Use (MU) | 1 | 24 | 31.53/31.53 | 15 du/ac |
| Castroville Community Plan | 3 | 13, 14, 30 | 5.96/5.40 | MU up to 30 du/ac |
| **Total Non-Vacant** | **36** | **—** | **399.33/285.88** | **—** |
| **Total Opportunity Sites** | **56** | **—** | **585.55/444.25** | **—** |

**Notes:** ac/du = acre per dwelling unit; du/ac = dwelling unit per acre

## 2.3 Planning Context

The UMC's development is generally guided by the Monterey County General Plan (2010 General Plan) for inland areas and the LCP for coastal areas of UMC. The LCP is a coastal management plan that contains land use, development, public access, and resource protection policies and regulations for portions of UMC within the Coastal Zone, as defined by the California Coastal Act. All projects in the Coastal Zone must meet LCP requirements and may be appealed to the California Coastal Commission if located within their appeal jurisdiction. Section 4.11, Land Use and Planning, includes further discussion of the proposed HEU6's consistency with relevant plans and ordinances.

### 2.3.1 General Plan Land Use and Zoning Designations

The existing 2010 General Plan Land Use Element, Master Plans, Community Plans, and APs provide separate Land Use Designation Maps for the inland areas of UMC. Separate Land Use Designation Maps are provided in the LCP for the coastal areas of UMC. The LCP includes 4 LUPs, with three opportunity sites (one site in North County LUP [Coastal] area, and two opportunity sites in the Carmel Area LUP) located in the Coastal Zone. The below figures denote the location of the 56 opportunity sites

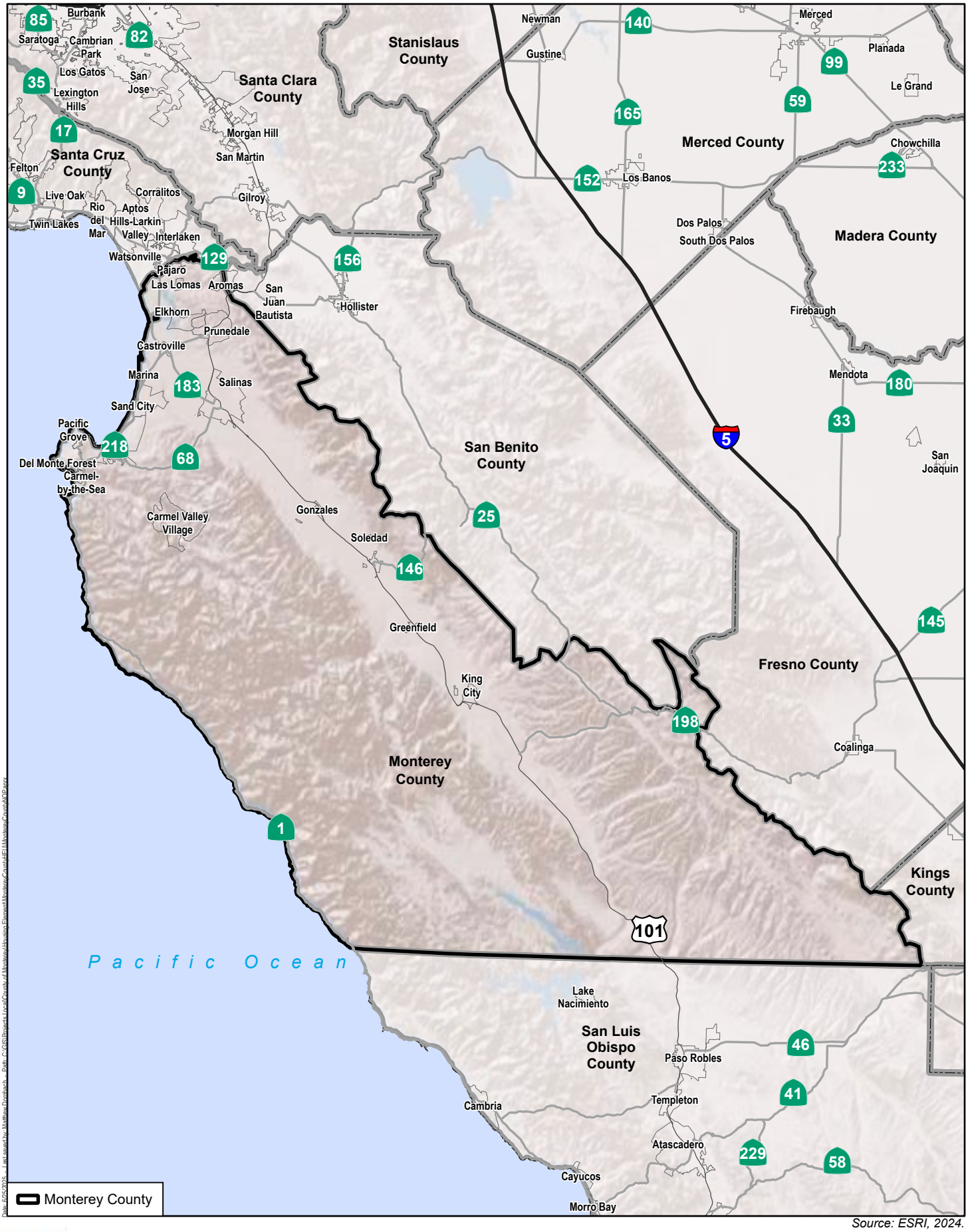
Table 2-1 describes the existing zoning for the 56 opportunity sites by LUP area for sites located in coastal area and by AP or Community Plan for sites located in the inland areas. Opportunity Site 53 is in the incorporated City of Marina.

## 2.4 Natural and Built Environment

UMC regional environment is a mix of suburban, urban, agricultural, and open space settings, and is largely developed with agricultural land uses for row crops, orchards, vineyards, greenhouses, livestock, animal husbandry, grazing, and associated agriculture-supportive industrial activities. Urbanized land uses, concentrated in the Monterey Peninsula area along Highway 68 and in the Salinas Valley along portions of Highway 101 in northern, central, and southern UMC include a mix of residential, commercial, agricultural, industrial, military, civic, and public/quasi-public uses. Vegetation in the project area includes a mix of native plant species, agricultural crops, coastal vegetative habitat that supports wildlife, marine-dependent vegetation, protected oak woodlands, and prairie habitat that is home to resource-dependent species. Water features in the environment throughout UMC provide corridors and rest areas for migratory species, suitable conditions for nesting and breeding such as estuaries and the marine sanctuary; drainage ponds, channels, and sloughs (natural or constructed); and riparian habitat along the banks of the Salinas, Pajaro and Carmel Rivers, smaller water courses, and wetlands. Some of the desirable native or endemic vegetation covering parts of the landscape, such as coastal chapparal and native grasses, are highly vulnerable to invasive species and/or changing environmental conditions. Section 4.4, Biological Resources, includes further discussion on additional biological resources throughout UMC.

## 2.5 Environmental Setting for Opportunity Sites

The environmental setting for the opportunity sites pertaining to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils (paleontological resources), greenhouse gases, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services, recreation, transportation, Tribal Cultural Resources, utilities and service systems, and wildfire is described in Sections 4.1 through 4.19 in the Environmental Setting sections.




*Source: ESRI, 2024.*

Harris & Associates

**Figure 2-1**

Regional Location

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: County of Monterey 2016; ESRI 2026.*

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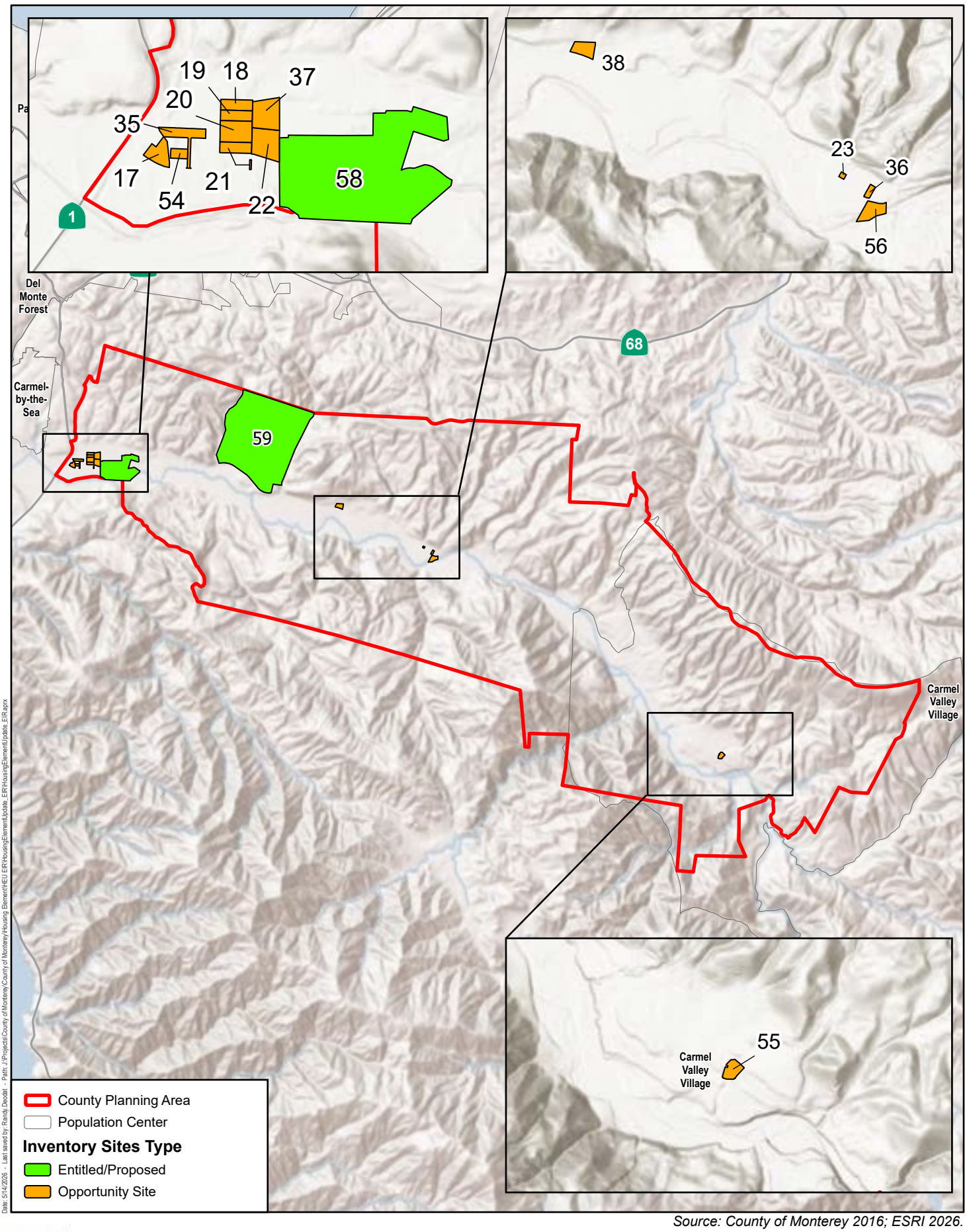
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**Figure 2-2a**

Project Location - Opportunity Sites in the Carmel Area Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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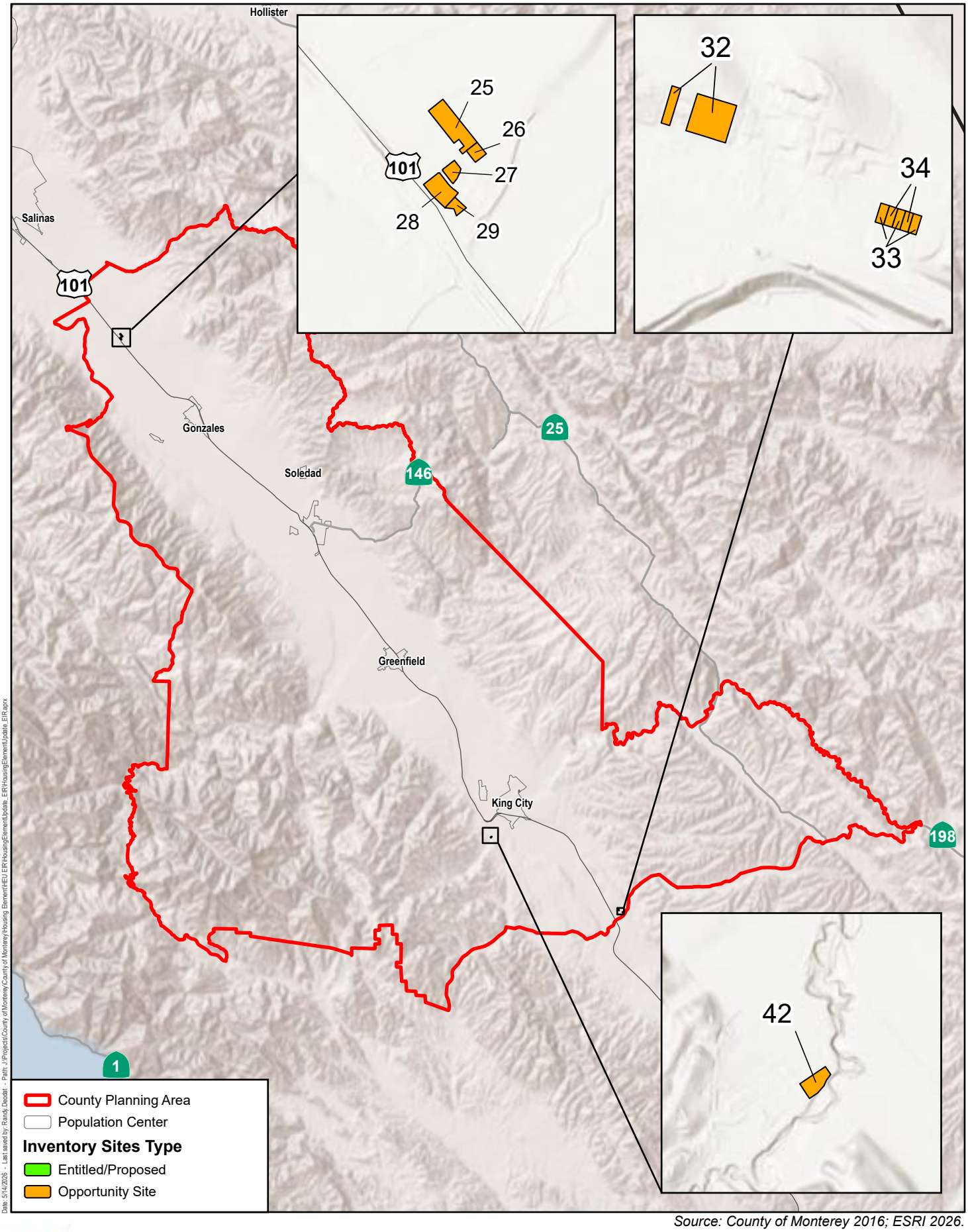
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**Figure 2-2b**

Project Location - Opportunity Sites in the Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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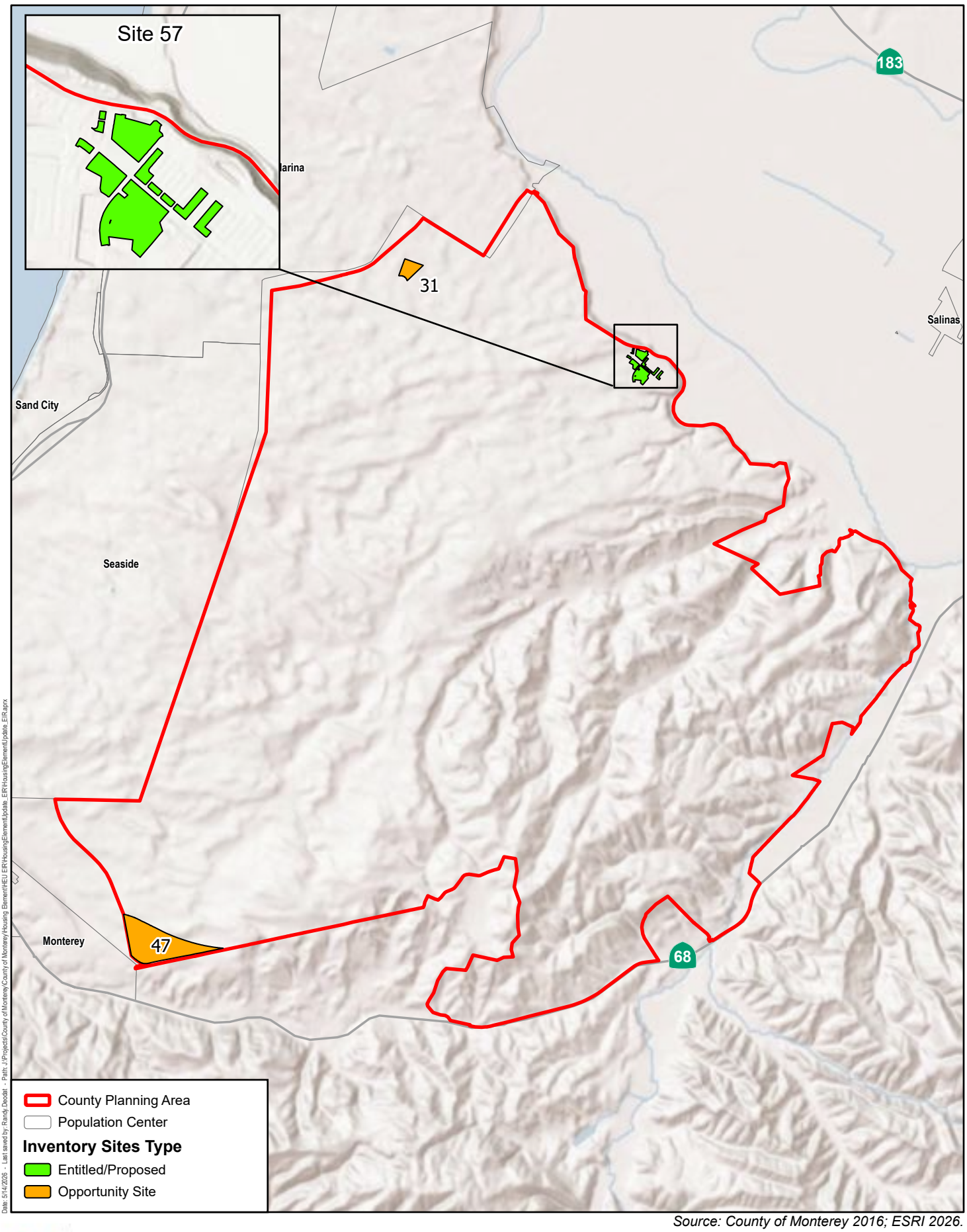
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**Figure 2-2c**

Project Location - Opportunity Sites in the Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

**Figure 2-2d**

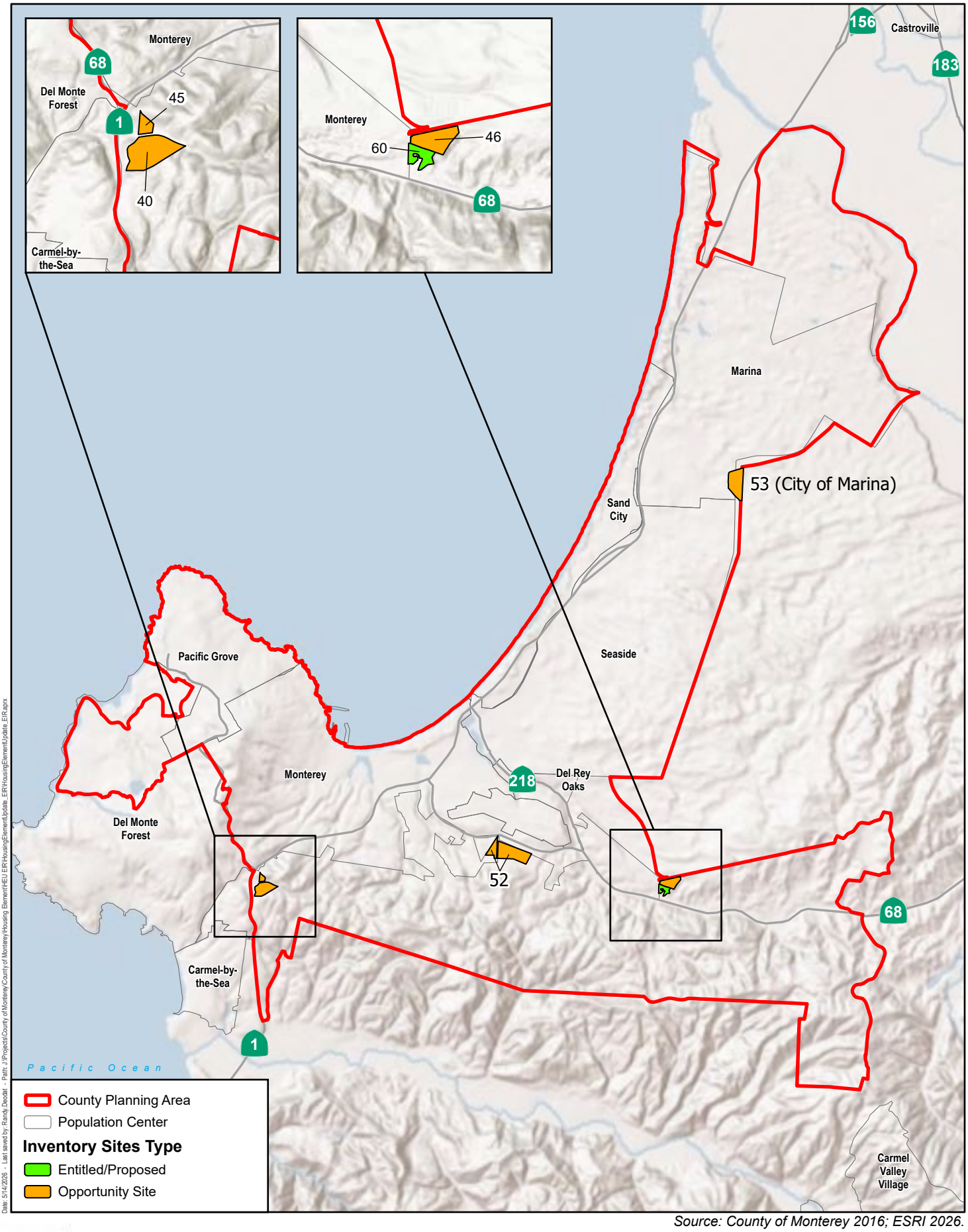
Project Location - Opportunity Sites in the Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

Harris & Associates

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*Source: County of Monterey 2016; ESRI 2026.*

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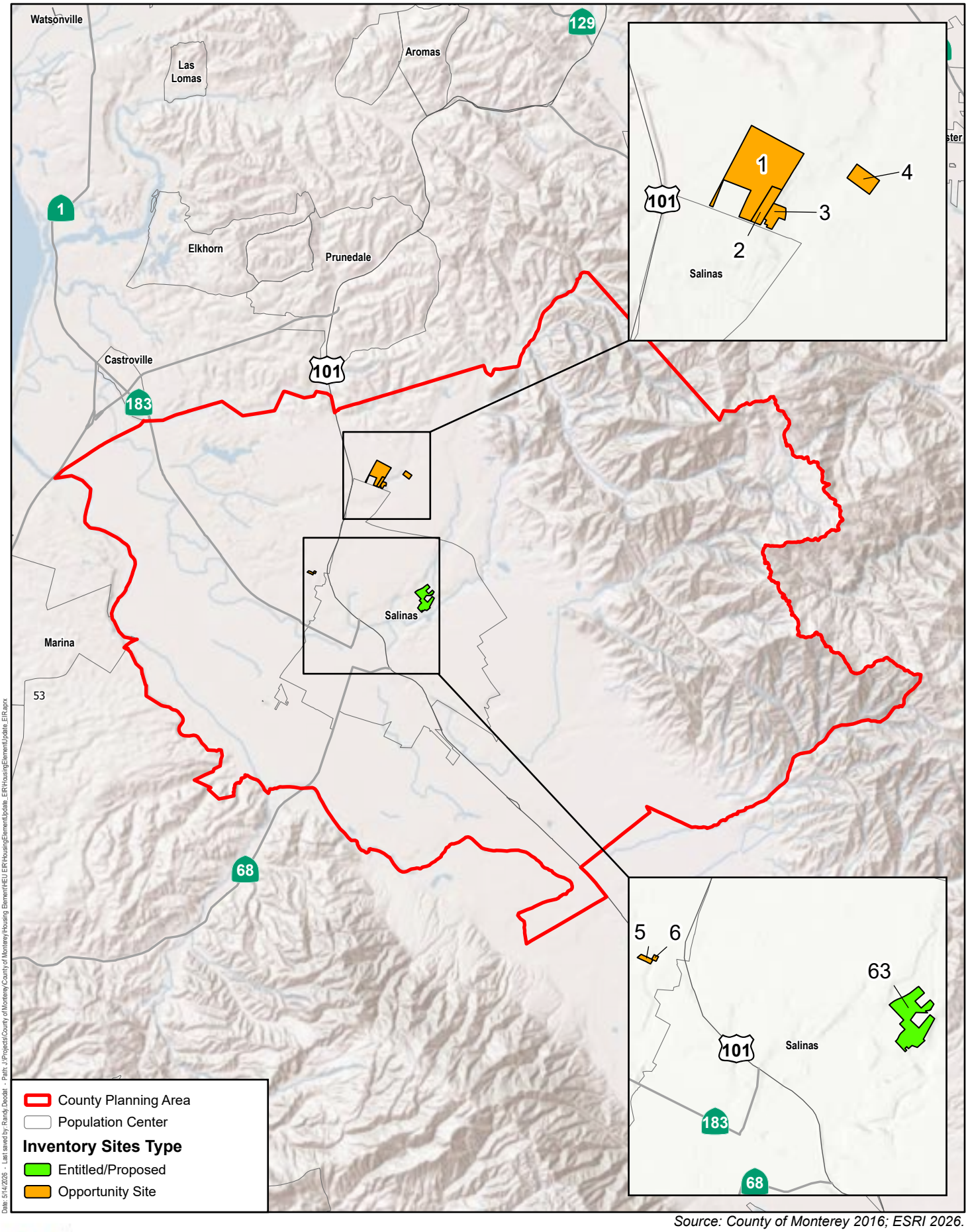
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**Figure 2-2e**

Project Location - Opportunity Sites in the Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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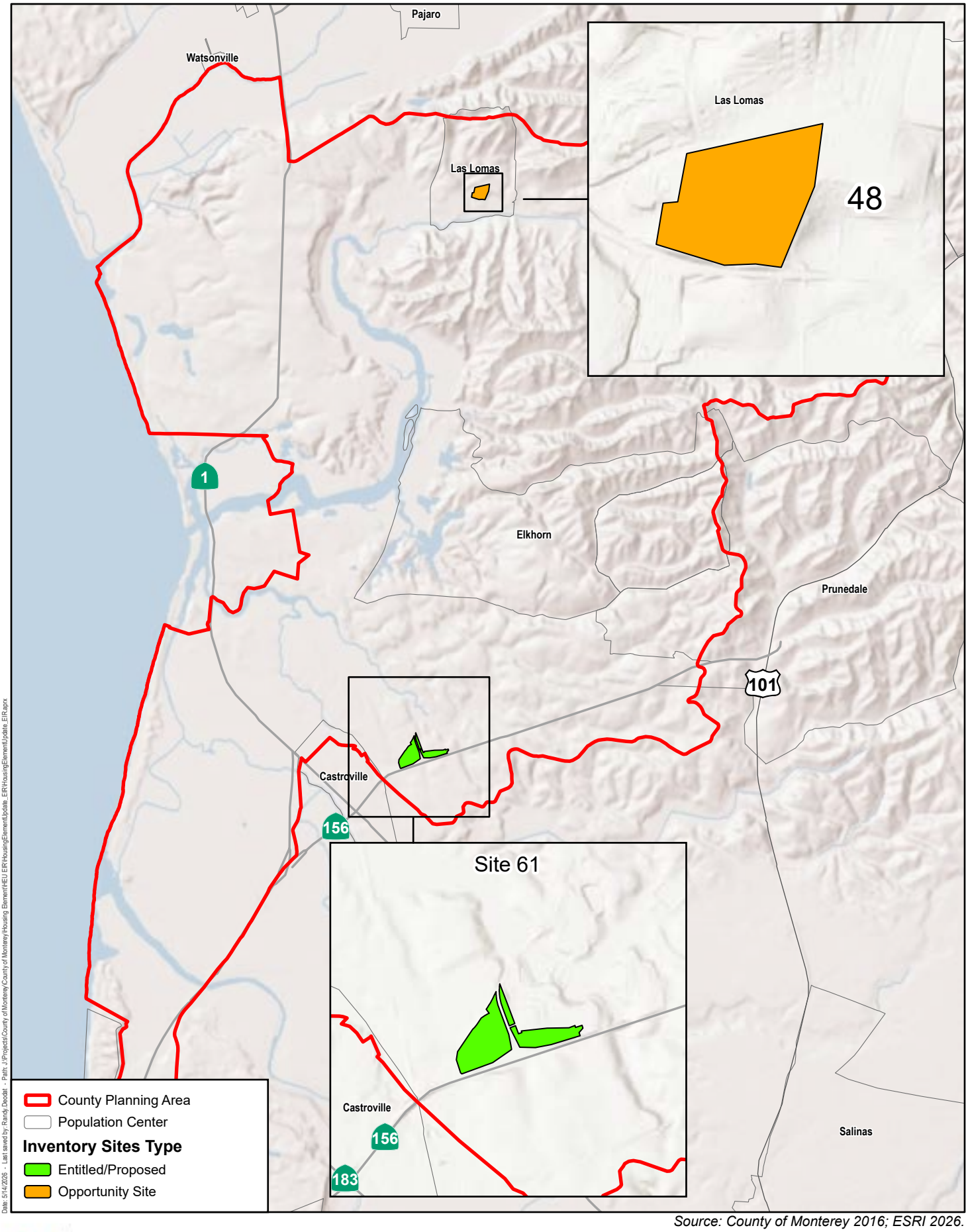
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**Figure 2-2f**

Project Location - Opportunity Sites in the Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: County of Monterey 2016; ESRI 2026.

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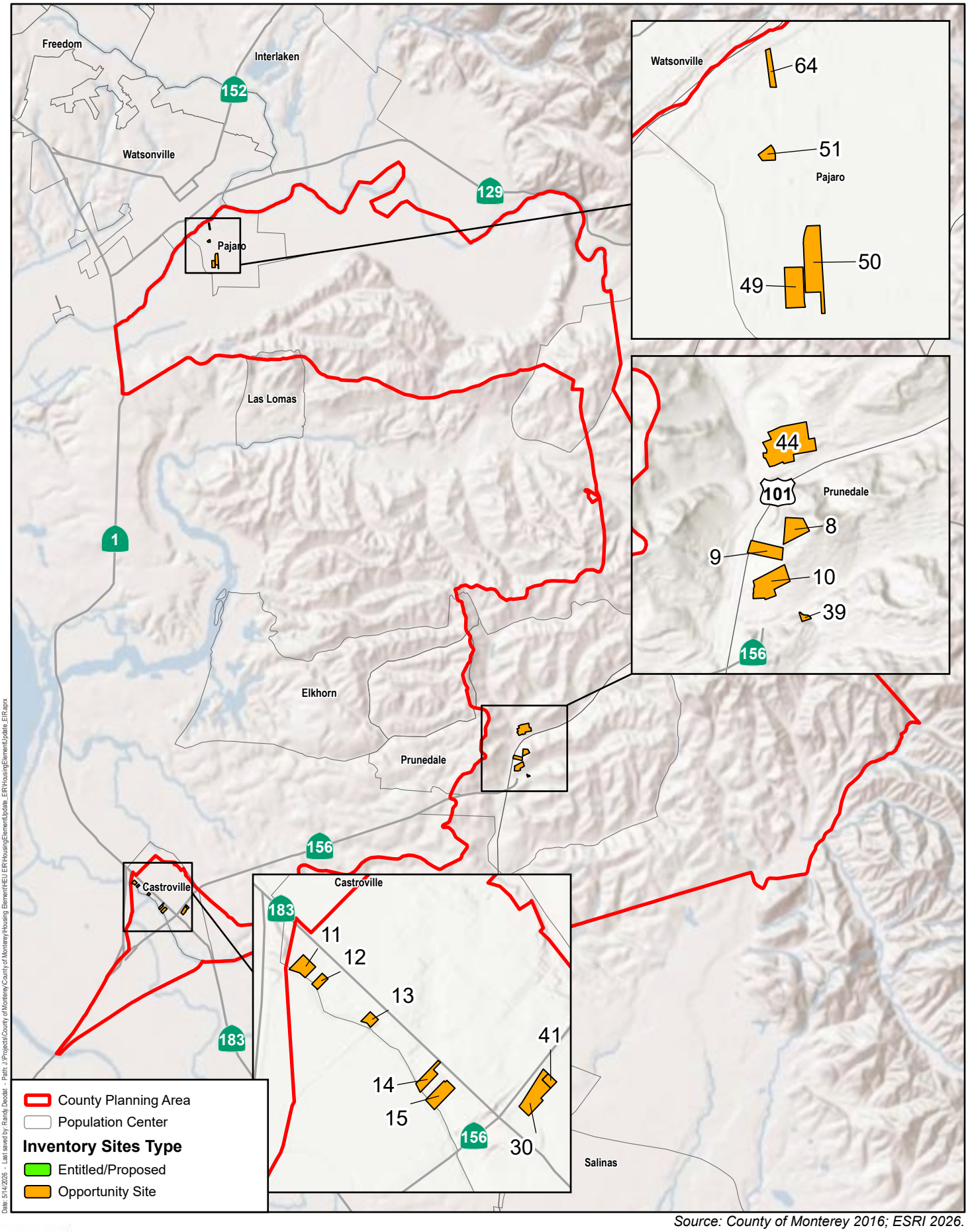
**Figure 2-2g**

Project Location - Opportunity Sites in the North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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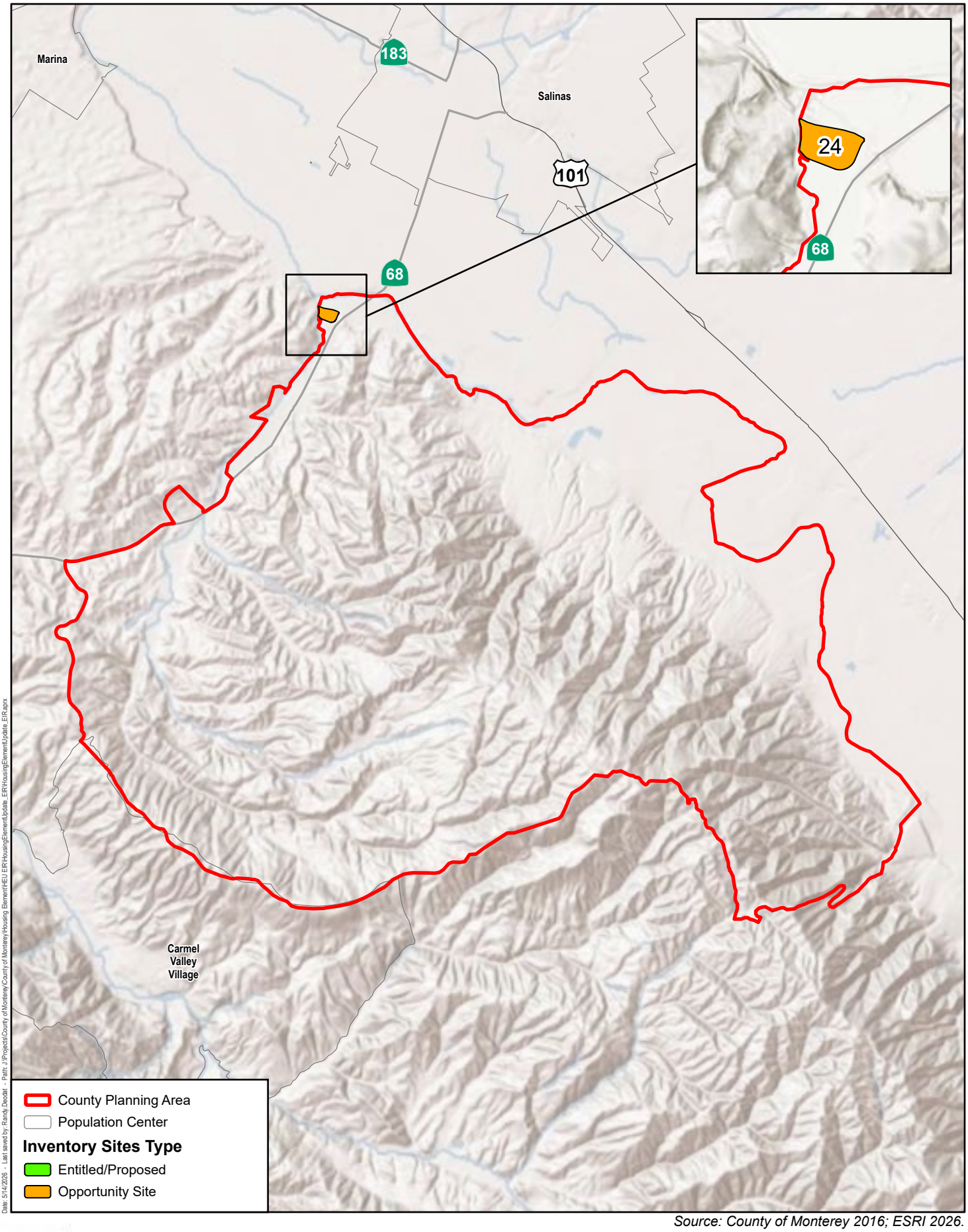
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**Figure 2-2h**

Project Location - Opportunity Sites in the North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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**Figure 2-2i**

Project Location - Opportunity Sites in the Toro Area Plan

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# Chapter 3 Project Description

The purpose of this chapter of the Program Environmental Impact Report (PEIR) is to describe the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project), for the public, reviewing agencies, and decision-makers.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development (CA HCD), while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

According to Section 15124 of the California Environmental Quality Act (CEQA) Guidelines, a complete project description must contain the following information:

- The precise location and boundaries of the project, as shown on a detailed project site map and a regional map (refer to Figures 2-1, Regional Location, and Figures 2-2a through 2-2i, Project Location);
- A statement of the objectives sought by the project;
- A description of the project's technical, economic, and environmental characteristics; and
- A statement of the intended uses of the Environmental Impact Report (EIR), including discretionary actions.

For the purposes of the PEIR, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 3.1 Project Objectives

The Association of Monterey Bay Area Governments (AMBAG) developed the Final Sixth Cycle Regional Housing Needs Allocation (RHNA) Plan 2023–2031 pursuant to California housing law (California Government Code, Section 65580 et seq.) to assign existing and projected housing needs to jurisdictions in the Monterey Bay Area region, including the County. Based on the Final RHNA Plan, the County was allocated 3,326 housing units across four income categories. The County, as the lead agency, must update its General Plan Housing Element to demonstrate how it will accommodate the expected growth in housing needs over this 8-year planning period. The

fundamental purpose of the project is to comply with state housing law and the Final RHNA Plan. In accordance with Section 15124(b) of the CEQA Guidelines, the County identified the following objectives for the project:

1. Prepare a compliant Housing Element that meets the state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031 while balancing economic, environmental, and social concerns.
2. Develop housing policies and programs to facilitate development of new units and preserve existing housing for residents at all income levels to address factors contributing to the statewide housing shortage.
3. Meet the housing needs of all economic segments of community members who live in the UMC areas in a manner that affirmatively furthers fair housing and supports the overall goal of providing safe and decent housing.
4. Provide a range of housing opportunities as near as possible to jobs, transit, services, and schools.
5. Provide adequate buffer with additional RHNA units to comply with the purpose of Senate Bill (SB) 166 (No Net Loss Law) and ensure implementation of the HEU6.
6. Update the 2010 Monterey County General Plan (2010 General Plan), Local Coastal Program (LCP), Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan, LCP, and County Code into conformance with state housing law.
7. Provide CEQA streamlining for housing development consistent with the HEU6, 2010 General Plan, LCP and County Code.

## 3.2 Project Background

The provision of adequate housing for families and individuals of all economic levels has been a focus for the State of California and local governments and has grown in complexity due to rising land and construction costs, along with increasing competition for physical and financial resources in both the public and private sectors.

In response to this concern, the California Legislature amended the California Government Code in 1980. The amendment instituted the requirement that each local community includes a specific analysis of its housing needs and a realistic set of programs designed to meet those needs. This analysis is to be set forth in a Housing Element and incorporated into the General Plan of each municipality.

The California Legislature determined that a primary housing goal for the State of California is to ensure that every resident has a decent home and suitable living environment. The requirements of the law are in California Government Code, Section 65580:

- The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order.
- The early attainment of this goal requires cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
- The provision of housing affordable to low- and moderate-income households requires the cooperation of all levels of government.
- Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.
- The California Legislature recognizes that in fulfilling this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments and the state in addressing regional housing needs.
- Designating and maintaining a supply of land and adequate sites suitable, feasible, and available for the development of housing sufficient to meet the locality's housing need for all income levels is essential to achieving the state's housing goals and the purposes of this article.

California Government Code, Section 65588, requires that local governments review and revise the Housing Element of their comprehensive General Plans (e.g., the County's 2010 General Plan and LCP) no less than once every 8 years. Before the HEU6 for the 2023–2031 planning period, the County's Housing Element was updated in 2016 for the Fifth Cycle (2015–2023).

Multiple changes to California Housing Element law have become effective since the processing of the County's Fifth Cycle Housing Element. In particular, the State of California increased its ability to enforce Housing Element requirements and the ability for interested people to challenge the County's compliance with Housing Element law. Pursuant to California Government Code, Section 65585, the State of California has a greater range of penalties that can be imposed on jurisdictions for non-compliance. This puts the County at risk of exposure to various fiscal and regulatory impacts that could reduce local control over housing-related decision-making. Jurisdictions that do not comply also risk the State of California imposing a more frequent Housing Element update cycle (i.e., every 4 years).

The HEU6 was prepared to comply with state housing laws, as amended, and federal, state, and local requirements as necessary to demonstrate compliance with state law and to achieve state certification. The Monterey County Housing Element Update has received CA HCD's determination that the revised draft satisfies the statutory requirements of state Housing Element law, with final findings of substantial compliance pending adoption and completion of the required rezonings.

## 3.3 Legal Requirements for the Housing Element

California Government Code, Section 65300.5, states the following: "The General Plan and elements and parts thereof comprise an integrated, internally consistent, and compatible statement of policies . . ." The purpose of requiring internal consistency is to avoid policy conflict and provide a clear policy guide for the future maintenance, improvement, and development of housing.

As discussed above, the HEU6 requires internal and integrated consistency with each of the County's General Plan Elements and the LCP. The County reviewed all elements of its 2010 General Plan—Land Use Element, Circulation Element, Conservation and Open Space Element, Safety Element, Public Services Element, Agriculture Element, and Economic Development Element—and its Land Use Plans (LUPs) of the LCP, including Area Plans, for necessary updates to avoid policy conflicts. The County reviewed the LCP, with specific focus on review of the North County LUP and the Carmel Area LUP to ensure consistency with the HEU6.

The County is currently updating its Safety Element, preparing a new Environmental Justice Element, and updating the Conservation and Open Space Element. These three elements will be accompanied by a separate CEQA document. The HEU6 establishes housing-related actionable programs intended to guide decision-making related to land use planning and development activities for the Sixth Cycle planning period in accordance with the County's stated housing goals for the UMC and state law.

California Government Code, Section 65583, contains requirements for Housing Elements, including the provision of an inventory of sites that meet specific criteria regarding zoning, lot sizes, and other factors. The general purpose of this Sites Inventory is to provide the planning and zoning framework that identifies sites suitable for residential development. However, cities and counties do not build housing units—housing developers and builders do. The HEU6 describes how the planning framework and actions within the control of the County will be established and conducted. Further, the Housing Element is not an approval of residential projects.

The Housing Element includes strategies for maintaining existing housing and action-oriented programs to increase the capacity for additional housing options within the local housing supply, to meet the current and future needs of people living and working in the UMC. Implementation of these strategies will require that the County process a series of future actions, referred to as the Housing Plan, for compliance with California housing law.

The HEU6 includes development of a by-right housing ordinance to facilitate streamlined implementation of the HEU6 (refer to Sections 3.7.3 through 3.7.5). California housing law supports by-right residential development to accelerate housing production, reduce permitting delays, and help jurisdictions meet their RHNA. State housing laws, such as SB 35, Assembly Bill (AB) 2011, SB 330, SB 4, and the Housing Accountability Act, limit local government discretion

over qualifying housing developments by requiring ministerial approval, restricting subjective standards, limiting the basis for denial, or imposing heightened findings requirements when projects meet certain objective design, zoning, and other standards. For example, SB 4 (the Affordable Housing on Faith and Higher Education Lands Act, California Government Code, Section 65913.16) is exempt from CEQA because it is required to be processed ministerially (by right). California accessory dwelling unit (ADU) laws require the County to approve ADUs ministerially, expanding opportunities for by-right development. In 2025, California passed AB 130 and SB 131, providing additional streamlining opportunities for housing development.

Additional housing laws may allow by-right development throughout the 2023–2031 planning horizon for the HEU6. The by-right housing ordinance would provide a pathway to help the County process future by-right applications in addition to implementation of the HEU6.

## 3.4 Regional Housing Needs Allocation

The California Department of Housing and Community Development (CA HCD) issues a Regional Housing Needs Determination to AMBAG for Monterey and Santa Cruz Counties using information provided by the California Department of Finance. The regional determination includes an overall housing need number, as well as a breakdown of the percentage of units required in four income distribution categories (i.e., very low, low, moderate, and above moderate). The region's overall allocation for Monterey, San Benito, and Santa Cruz Counties is 38,279 housing units.[1] AMBAG is required to distribute this overall regional allocation number to the jurisdictions in the region for the 8-year planning period for the creation of housing units, including affordable units under various income categories. These quantified numbers are known as the RHNA.

Table 3-1, 2023–2031 Affordability Income Ranges and Regional Housing Needs Allocation, shows the affordability income categories, income ranges, and area median income (AMI) for the 2023–2031 planning period based on the 2023 CA HCD income limits for the County, for which the RHNA income categories are based. As shown, the County has an AMI of $100,400, and the income categories are defined by AMI percentage, with extremely low/very low-income households earning up to 50 percent AMI (up to $60,200), low-income households earning between 50 percent and 80 percent AMI ($60,200 to $96,350), moderate-income households earning between 80 percent and 120 percent AMI ($96,350 to $120,500), and above moderate-income households earning over 120 percent AMI (more than $120,500). As shown in Table 3-1, the required RHNA assigned for the UMC over the 8-year planning period (2023–2031) for the

[1] The state mandate for distributing the RHNA is tied to the state designation of a Council of Governments (COG). Each COG is expected to distribute the RHNA to their member jurisdictions. AMBAG is the Metropolitan Planning Organization for the Counties of San Benito, Santa Cruz, and Monterey and has prepared a 2045 /SCS for the tri-county region. However, it is the COG for only the Counties of Santa Cruz and Monterey. For this reason HCD makes a separate determination for San Benito County and tasks the San Benito County Council of Governments with developing its own RHNA Plan. AMBAG coordinates with the San Benito COG so that its RHNA Plan is consistent with the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (AMBAG 2022).

Sixth Cycle totals 3,326 units, including 1,070 extremely low/very low-income, 700 low-income, 420 moderate-income, and 1,136 above moderate-income units.

**Table 3-1. 2023–2031 Affordability Income Ranges and Regional Housing Needs Allocation**

| Income Category | % Median | Income Range | | 2023–2031 RHNA | % of Total |
|---|---|---|---|---|---|
| | | Minimum | Maximum | | |
| Extremely Low/Very Low | 0–50% | $0 | $60,200 | 1,070 | 32% |
| Low | 50–80% | $60,200 | $96,350 | 700 | 21% |
| Moderate | 80–120% | $96,350 | $120,500 | 420 | 13% |
| Above Moderate | 120% | $120,500 | — | 1,136 | 34% |
| | | | **Total** | **3,326** | **100%** |
| 2023 CA HCD Income Limits, Monterey County, AMI = $100,400 | | | | | |

**Source:** AMBAG 2022; HCD 2023.

**Notes:** AMI = area median income; RHNA = Regional Housing Needs Assessment

Additionally, the CA HCD recommends a buffer of 15 to 30 percent or more units in each income level to account for potential site-specific constraints or delays in development, particularly for lower-income housing. This buffer complies with the purpose of SB 166 (No Net Loss Law) to ensure that the County maintains adequate capacity throughout the 8-year planning period. The County is also required to monitor housing production as the planning period progresses and ensure that the County does not reduce the housing capacity below what is needed to meet the RHNA target by income level.

## 3.5 Project Components

The County proposes to amend the 2010 General Plan to update its Housing Element for the Sixth Cycle 2023–2031 planning period, as well as other components of the General Plan and applicable LUPs of the County's LCP. Updates include amendments to the following:

- Circulation Element
- Conservation and Open Space Element
- Land Use Element
- Public Services Element
- Carmel Valley Master Plan
- Central Salinas Valley Area Plan
- Fort Ord Master Plan
- Greater Monterey Peninsula Area Plan
- Greater Salinas Area Plan
- North County Area Plan
- Toro Area Plan
- LCP components, including the Carmel Area LUP and North County LUP

County Code amendments are also necessary to Title 20 (coastal zone), and Title 21 (inland areas), and other amendments as necessary to implement the HEU6 and comply with state law. One specific County Code amendment will include development of a by-right housing ordinance for County Board of Supervisors consideration, as discussed above and detailed further in Sections 3.7.3 through 3.7.5.

The project is required to identify sites and zoning designations that can accommodate housing developments to satisfy the County's RHNA of 3,326 housing units distributed across four income levels (1,070 extremely low/very low-income, 700 low, 420 moderate, and 1,136 above moderate). Along with facilitating the County's RHNA, the HEU6 must identify and analyze significant disparities in access to opportunity (AB 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

The HEU6 establishes programs, policies, and actions to further the goal of meeting the existing and projected housing needs for residents of all income levels throughout the UMC (refer to Table 3-1). The HEU6 explains processes by which the County proposes to accommodate the RHNA assigned to the County for the 8-year planning period from 2023 to 2031.

### 3.5.1 Sites Inventory

Pursuant to legal requirements for the Housing Element, the County has identified sites in the UMC that are suitable for the development of all housing types, with the capacity to satisfy the housing needs for the Sixth Cycle. The assessment of the County's capacity for new housing development (Sites Inventory) must demonstrate that the RHNA target of 3,326 housing units, inclusive of 1,770 lower-income (extremely low/very low and low-income) affordable units, plus a buffer of 15 to 30 percent or more units in each income level can reasonably be achieved under the County's current LUPs and zoning regulations or with planned amendments thereto. Furthermore, to address the "no net loss" provisions, the County completed the following steps in preparing the Sites Inventory:

- Evaluated the need to reduce the estimates of site housing capacity based on topography, environmental features, site acreage, and expectations for mixed-use development. Where deemed appropriate, the County applied such reductions.
- Further reduced estimated site housing capacity to ensure estimates are conservative, ranging between 50 percent to no more than 80 percent of the net potential housing units, based on site-specific zoning and designated income levels for units.
- Identified sufficient sites with housing capacity to provide a reasonable capacity buffer (17 percent of gross RHNA numbers for the extremely low/very low-income level, 34 percent for the low-income level, and 70 percent for the moderate-income level) above the County's RHNA targets so the County maintains adequate capacity to meet its targets.

The Sites Inventory provided in the HEU6 is adequate for the development of housing to meet the RHNA target with a reasonable capacity buffer, and the sites either have zoned housing capacity that is reasonably developable within the planning period or will have such capacity with planned zoning. The County will rezone all opportunity sites to create enough capacity to meet the RHNA target, as described in Section 3.5.2, Rezoning and Split Zoning.

As demonstrated in the Sites Inventory, the HEU6 identifies sufficient capacity to accommodate the County's RHNA across all income levels by providing a reasonable total capacity for 5,897 housing units as summarized below:

- 4,434 units on sites without existing entitlements or approvals projected to be developed during the Sixth Cycle (opportunity sites).
- 1,117 units on sites with entitled and proposed projects expected to be completed during the Sixth Cycle (entitled/proposed or pipeline). Pipeline sites with a proposed development are included if the developer has applied or received entitlement approval and is expected to receive a building permit or certificate of occupancy after the beginning of the County's RHNA projection period (i.e., June 30, 2023). In these cases, projected site densities are based on owner-proposed development densities.
- 346 units from projected ADUs developments during the Sixth Cycle (not site-specific). The ADU number was calculated by multiplying the number of ADUs developed in the UMC in the previous 5-year average by the 6 years remaining in the Sixth Cycle and applying the affordability breakdown of the total 5-year average for each of the income levels, and no specific sites are identified for the ADUs. As shown in Table 3-2, Capacity Determination, the County is projecting no extremely low/very low-income and moderate-income ADUs because no extremely low/very low or moderate-income ADUs were developed in the UMC over the last 5 years.

As shown in Table 3-2, the Sites Inventory has the capacity for at least 4,434 housing units from opportunity sites and 1,117 housing units from pipeline sites under the proposed or existing zoning and 346 ADUs potential without specific sites, for a combined total capacity of 5,897 housing units. Table 3-2 identifies pipeline sites and ADUs as "Alternative Methods to Meet the RHNA (credit)" pursuant to California Government Code, Section 65583.1. This indicates that while these units are credited toward meeting the Sixth Cycle RHNA target, their provision is not dependent on the outcome of the HEU6. For instance, development on pipeline sites is currently being processed by the County independently of the HEU6. In addition, ADUs are generally defined by the County as attached or detached residential dwelling units which meet all of the following requirements: does not exceed 1,200 square feet; is on a lot with a proposed or existing primary dwelling; provides complete independent living facilities for one or more people; and includes permanent provision for living, sleeping, eating, cooking, and sanitation on the same parcel as the proposed or existing single-family dwelling or multi-family dwelling is situated. Therefore, ADUs

could also be developed independently of the HEU6 in areas zoned for single-family or multi-family residential use.[2]

As such, pipeline sites and ADUs are evaluated independently of the HEU6 and are not evaluated in this PEIR. For the purposes of this PEIR analysis, the potential impacts focus on the physical environmental changes associated with the changes proposed as part of opportunity sites.[3]

The HEU6 includes a total of 56 opportunity sites, including Opportunity Sites 1 through 6, 8 through 56, and Site 64, totaling 4,434 housing units as summarized above and in Table 3-2.

**Table 3-2. Capacity Determination**

| | EL/VLI | LI | Mod. | Above Mod. | Total |
|---|---|---|---|---|---|
| RHNA | 1,070 | 700 | 420 | 1,136 | 3,326 |
| **Alternative Methods to Meet the RHNA (Credits)[1]** | | | | | |
| Pipeline Sites | 257 | 206 | 157 | 497 | 1,117 |
| ADU Potential | 0 | 7 | 0 | 339 | 346 |
| *Subtotal* | *257* | *213* | *157* | *836* | *1,463* |
| **Opportunity Sites[2]** | | | | | |
| Total from Opportunity Sites | 999 | 726 | 555 | 2,154 | 4,434 |
| **Total (Credits and Opportunity Sites)** | **1,256** | **939** | **712** | **2,990** | **5,897** |
| Surplus/(Shortfall) | 186 | 239 | 292 | 1,854 | 2,571 |
| **Total RHNA Buffer[3]** | **17%** | **34%** | **70%** | **163%** | **77%** |

**Notes:** ADU = accessory dwelling unit; EL = extremely low; LI = low-income; Mod = moderate-income; Above Mod. = above moderate-income; VLI = very low-income; RHNA = Regional Housing Needs Assessment

[1] Pursuant to California Government Code, Section 65583.1, the pipeline sites and ADUs are considered alternative methods to meet the RHNA, as these units do not require the HEU6 to be implemented and are being credited in addition to the development of new housing on opportunity sites. California Government Code, Section 65583.1, outlines alternative methods for local governments to identify adequate sites for housing. It allows for flexibility in how cities and counties meet their Housing Element requirements, including using existing housing units and allowing certain methods for identifying sites.

[2] The determination of opportunity sites uses the proposed zoning changes and capacity expectations as described in the 2023–2031 Housing Element Sixth Cycle Housing Element, Chapter 7, Adequate Sites Inventory Analysis and Methodology (June 2025).

[3] The CA HCD recommends a 15–30 percent buffer for lower-income (extremely low/very low and low) sites to protect the County from the "no net loss" provision. The County included a buffer for the moderate-income level for the same reason. The County calculated its buffer as a percentage of the gross RHNA (before any credits were applied).

The 56 opportunity sites are in nine planning areas of the UMC, except Opportunity Site 53, which is in the City of Marina, as shown on Figures 2-2a through 2-2i:

- Carmel Area Land Use Plan Sites
- Carmel Valley Master Plan Sites
- Central Salinas Valley Area Plan Sites

[2] California Government Code, Sections 65852.2 (for ADUs) and 65852.22 (for junior ADUs), allow a local agency, by ordinance, to provide for the creation of ADUs in areas zoned for single-family or multi-family residential use. These sections also require local agencies to ministerially approve ADUs and junior ADUs that meet the specified criteria. Ministerial approvals are not subject to CEQA pursuant to CEQA Guidelines, Section15268.

[3] The pipeline sites are included on Figure 2-2 for informational purposes only.

- Fort Ord Master Plan Sites
- Greater Monterey Peninsula Area Plan Sites
- Greater Salinas Valley Area Plan Sites
- North County Land Use Plan (Coastal) Sites
- North County Area Plan (Inland) Sites
- Toro Area Plan Sites

Table 3-3, Opportunity Sites Inventory Summary, summarizes the distribution of opportunity sites in nine planning areas and the number of units by income category.

**Table 3-3. Opportunity Sites Inventory Summary**

| Opportunity Sites | EL/VLI | LI | Mod. | Above Mod. | Total |
|---|---|---|---|---|---|
| North County Area Plan (Inland) | 241 | 163 | 108 | 131 | 643 |
| Carmel Valley Master Plan | 141 | 87 | 58 | 182 | 468 |
| Greater Monterey Peninsula Area Plan | 219 | 165 | 140 | 770 | 1,294 |
| City of Marina[1] | 214 | 143 | 95 | 24 | 476 |
| Greater Salinas Valley Area Plan | 94 | 77 | 82 | 645 | 898 |
| Fort Ord Master Plan | 29 | 29 | 41 | 92 | 191 |
| Toro Area Plan | 9 | 9 | 12 | 116 | 146 |
| Central Salinas Valley Area Plan | 12 | 12 | 14 | 141 | 179 |
| Carmel Area Land Use Plan | 4 | 17 | 5 | 49 | 75 |
| North County Land Use Plan (Coastal) | 36 | 24 | 0 | 4 | 64 |
| **HEU6 Net New Opportunity Sites** | **999** | **726** | **555** | **2,154** | **4,434** |

**Notes:** EL = extremely low; HEU6 = County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update; LI = low-income; Mod = moderate-income; Above Mod. = above moderate-income; VLI = very low-income; RHNA = Regional Housing Needs Assessment

[1] Opportunity Site 53 is shown on Figure 2-2e, Greater Monterey Peninsula Area Plan Sites. However, this site is within the incorporated limits of the City of Marina. The CA HCD recommends a 15–30 percent buffer for lower-income (extremely low/very low and low) sites to protect the County from the "no net loss" provision. The County included a buffer for the moderate-income level for the same reason. The County calculated its buffer as a percentage of the gross RHNA (before any credits were applied).

### 3.5.2 Rezoning and Split Zoning

The County will rezone all opportunity sites to create enough capacity to meet the RHNA target. Specifically, all opportunity sites will be rezoned to either the HDR/25 (High Density Residential at 25 dwelling units per acre) or HDR/30 (High Density Residential at 30 dwelling units per acre). These designations would require a minimum density of 10 dwelling units per acre and would allow densities of up to 25 dwelling units per acre (in the HDR/25 zone) or 30 dwelling units per acre (in the HDR/30 zone). A minimum of 20 dwelling units per acre is required for a use by right (as outlined in Section 3.7.3, By-Right Development). Densities of up to 30 dwelling units per acre (HDR/30) are allowed only in areas where public sewer and water service are available.

By rezoning the opportunity sites to HDR/25 and HDR/30, a theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites is technically permitted. However,

development of 12,497 new housing units is highly unlikely based on historical building trends and market demand in the UMC. For instance, building permits for only 1,848 housing units were issued in the UMC during the Fifth Cycle planning period. Therefore, it is unreasonable to assume buildout of development at the theoretical maximum capacity and the associated height and scale that would be required to achieve this many units in the UMC during the Sixth Cycle 2023–2031 planning period.

Where it is known currently, the HEU6 proposes a split zone approach for 14 opportunity sites (Opportunity Sites 10 through 15, 38, 43 through 47, 52, and 56). This approach is intended to account for known site-specific development constraints, including existing development on underutilized properties, compliance with airspace protection and safety regulations, and resource protection associated with sloughs and the Carmel River while still allowing residential development to occur on a portion of these sites (Table 3-4, Opportunity Sites Split Zoning Summary). Currently, it is infeasible to know the boundaries within each of the 56 opportunity sites that will be suitable for development, total unit counts of development projects, or any of the design criteria or layout of development projects under the HEU6. Because the exact boundaries of the proposed split zoning have not been finalized at the time of this analysis, the PEIR conservatively assumes that the entire parcel area of each opportunity site would be rezoned to HDR/25 or HDR/30 and could be developed under the proposed zoning designations. Where applicable, the site-specific discussions identify how the proposed split zoning approach would reduce potential environmental impacts by limiting development within constrained portions of the sites.

**Table 3-4. Opportunity Sites Split Zoning Summary**

| Site No. | Rezoned Acreage | Current Zoning | Proposed Zoning | Split Zone Direction | Connection to Water/Sewer[1] |
|---|---|---|---|---|---|
| 10 | 6.09 | LC | HDR/25 and LC | Developed portion of site will keep LC zoning and remaining developable acreage to be rezoned as HDR/25. | No |
| 11 | 1.46 | CCP (MU-C) | HDR/30 | Portions of the properties that abut the Tembladero Slough to be rezoned as RC and remaining developable acreages to be rezoned as HDR/30. | Yes |
| 12 | 0.62 | CCP (MU-C) | HDR/30 | | Yes |
| 13 | 0.64 | CCP (MU-C) | HDR/30 | | Yes |
| 14 | 1.13 | CCP (MU-C) | HDR/30 | | Yes |
| 15 | 1.82 | CCP (MU-C) | HDR/30 | | Yes |
| 38 | 3.29 | PQP-D-S-RAZ | HDR/25 and PQP-D-S-RAZ | Developed portion of site will keep PQP-D-S-RAZ zoning and remaining developable acreage to be rezoned as HDR/25. | No |

**Table 3-4. Opportunity Sites Split Zoning Summary**

| Site No. | Rezoned Acreage | Current Zoning | Proposed Zoning | Split Zone Direction | Connection to Water/Sewer[1] |
|---|---|---|---|---|---|
| 43 | 1.46 | MDR/2-D(CZ) | HDR/30 and MDR/2-D(CZ) | Developed portion of site will keep MDR/2-D(CZ) zoning and remaining developable acreage to be rezoned as HDR/30. | Yes |
| 44 | 8.50 | LC | HDR/25 and LC | Developed portion of site will keep LC zoning and remaining developable acreage to be rezoned as HDR/25. | No |
| 45 | 2.97 | RDR/5.1-UR-D-S | HDR/30 and RDR/5.1-UR-D-S | Developed portion of site will keep RDR/5.1-UR-D-S zoning and remaining developable acreage to be rezoned as HDR/30. | Yes |
| 46 | 4.00 | PQP-D-S | HDR/30 and PQP-D-S | Developed portions of sites will keep PQP-D-S zoning for airport safety and remaining developable acreages to be rezoned as HDR/30. | Yes |
| 47 | 15.00 | PQP-D-S | HDR/30 and PQP-D-S | | Yes |
| 52 | 43.00 | RC/10-UR-D-S | HDR/30 and RC | RC zoning for 26.86 portion of the property. | Yes |
| 56 | 2.12 | LDR/1-D-S-RAZ and LDR/B-6-D-S-RAZ | HDR/25 and RC | RC zoning for portion of the property that abuts the Carmel River. | No |

**Notes:** CCP = Castroville Community Plan; HDR = High Density Residential; LC = Light Commercial; MDR = Medium Density Residential; MU-C = Mixed-Use Commercial; PQP = Public/Quasi-Public; RC = Resource Conservation

[1] Only the opportunity sites where water and sewer service are available will allow densities of up to 30 dwelling units per acre (HDR/30).

For the purposes of environmental analysis under CEQA, chapters of this PEIR that rely on maximum zoning for modeling purposes evaluate the maximum theoretical buildout scenario of 12,497 units permitted under the proposed HDR/25 and HDR/30 zoning designations across the 56 opportunity sites (rather than the reasonable development capacity of 4,434 units on the same 56 opportunity sites as stated in the HEU6).[4] This upper bound scenario was used for technical analyses that are associated with the transportation modeling for vehicle miles traveled (VMT), including for air emissions (Section 4.3, Air Quality), greenhouse gas emissions (Section 4.8, Greenhouse Gas Emissions), noise (Section 4.13, Noise), and VMT (Section 4.16, Transportation). This was done for technical analyses that require conservative modeling to ensure the PEIR fully discloses the potential environmental consequences of the project by analyzing the highest intensity of development legally permissible under the proposed zoning. However, the theoretical maximum capacity is not used for the majority of analyses in Chapter 4, Environmental Analysis, of this PEIR because it is an

[4] The theoretical maximum total capacity of 12,497 new housing units is based on the expected rezone acreage and not the entire opportunity site acreage.

unreasonable expectation of future growth. Therefore, the majority of analyses in this PEIR assume a reasonable capacity of 4,434 housing units on 56 opportunity sites or evaluate the location of opportunity site parcels based on the significance thresholds for each environmental resource. The assumptions used in the analysis to determine impacts on the environment are discussed in the Method of Analysis section of each section in Chapter 4 of the PEIR. These include either buildout of a reasonable development capacity of 4,434 housing units, the theoretical maximum capacity of 12,497 housing units, or the location of the opportunity site parcels.

While the HEU6 reflects what the County anticipates will realistically be constructed based on market trends and site-specific constraints, the PEIR uses the higher theoretical density, where applicable, to ensure that all potential environmental impacts are accounted for, although the County fully acknowledges that the buildout at these maximum permitted densities on opportunity sites is implausible. This approach provides conservative, worst-case disclosure of impacts for those technical analyses that require conservative modeling, as noted above.

### 3.5.3 Opportunity Sites Inventory

Table 3-5, Opportunity Sites Inventory, shows the affected Assessor's Parcel Numbers, existing 2010 General Plan and LCP land use and zoning designations, proposed rezoning designations under the HEU6, and total capacity on each opportunity site with affordability income categories.

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 113-161-018-000 | 95.31/95.31 | Farmland | GSAP | F/40 | HDR/30 | 2,859 | 728 | 44 | 44 | 58 | 582 |
| 2 | 113-161-019-000 | 10.68/10.68 | Farmland | GSAP | F/40 | HDR/30 | 320 | 67 | 22 | 14 | 9 | 22 |
| 3 | 113-161-012-000 | 8.33/8.33 | Residential – Medium Density 1–5 Units/Acre | GSAP | MDR/5 | HDR/30 | 249 | 45 | 15 | 10 | 6 | 14 |
| 4 | 211-012-034-000 | 12.24/12.24 | Public/Quasi-Public | GSAP | PQP | HDR/30 | 367 | 27 | 12 | 8 | 5 | 2 |
| 5 | 261-101-006-000 | 4.04/4.04 | Residential – Medium Density 1–5 Units/Acre | GSAP | MDR/4-A-UR | HDR/25 | 101 | 15 | 0 | 0 | 3 | 12 |
| 6 | 261-101-002-000 | 1.54/1.54 | Residential – Medium Density 1–5 Units/Acre | GSAP | MDR/4-A-UR | HDR/25 | 38 | 16 | 1 | 1 | 1 | 13 |
| 8 | 125-501-002-000 | 4.25/4.25 | Residential – Low Density 5–1 Acres/Unit | NCAP (Inland) | LDR/2.5 | HDR/25 | 106 | 68 | 31 | 20 | 14 | 3 |
| 9 | 125-171-029-000 | 4.09/4.09 | Public/Quasi-Public | NCAP (Inland) | PQP | HDR/25 | 102 | 66 | 30 | 20 | 13 | 3 |
| 10 | 125-171-047-000 | 7.01/6.09 | Commercial | NCAP (Inland) | LC | HDR/25 and LC | 152 | 98 | 44 | 29 | 20 | 5 |
| 11 | 030-141-029-000 | 1.80/1.46 | Mixed-Use (2007 Castroville CP) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 and RC | 43 | 29 | 13 | 9 | 6 | 1 |
| 12 | 030-151-008-000 | 0.73/0.62 | Mixed-Use (2007 Castroville CP) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 and RC | 18 | 12 | 5 | 4 | 2 | 1 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 030-155-005-000 | 0.79/0.64 | Mixed-Use (2007 Castroville CP) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 and RC | 19 | 13 | 6 | 4 | 2 | 1 |
| 14 | 030-171-001-000 | 1.54/1.13 | Mixed-Use (2007 Castroville CP) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 and RC | 33 | 25 | 11 | 8 | 5 | 1 |
| 15 | 030-171-015-000 | 4.46/4.46 | Mixed-Use (2007 Castroville CP) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 and RC | 54 | 38 | 17 | 11 | 8 | 2 |
| 16 | 009-061-003-000 009-061-005-000, 009-061-010-000, 009-061-013-000, 009-061-014-000, 009-061-015-000, 009-061-016-000 | 4.45/4.45 | Residential – Medium Density | CLUP – CALUP | MDR/2-D(CZ) | HDR/30 | 129 | 52 | 0 | 13 | 0 | 39 |
| 17 | 009-562-015-000, 009-562-016-000, 009-562-002-000 | 3.51/3.51 | Commercial | CVMP | LC-D-S-RAZ | HDR/30 | 103 | 34 | 5 | 0 | 0 | 29 |
| 18 | 015-021-026-000 | 2.67/2.67 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 80 | 23 | 11 | 7 | 5 | 0 |
| 19 | 015-021-025-000 | 2.63/2.63 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 78 | 23 | 11 | 7 | 5 | 0 |
| 20 | 015-021-015-000 | 5.33/5.33 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 159 | 24 | 2 | 0 | 2 | 20 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 015-021-021-000, 015-021-020-000, 015-021-049-000 | 2.83/2.83 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 82 | 25 | 3 | 0 | 2 | 20 |
| 22 | 015-021-004-000 | 6.25/6.25 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 187 | 25 | 3 | 0 | 2 | 20 |
| 23 | 169-235-009-000, 169-235-010-000, 169-235-011-000, 169-235-012-000 | 0.48/0.48 | Planned Commercial | CVMP | LC-D-S | HDR/25 | 10 | 8 | 3 | 2 | 1 | 2 |
| 24 | 161-011-074-000 | 31.53/31.53 | Mixed-Use | Toro Area Plan | MU/15-D | HDR/25 | 788 | 146 | 9 | 9 | 12 | 116 |
| 25 | 145-151-001-000 | 5.66/5.66 | Public/Quasi-Public | CSVAP | PQP | HDR/25 | 141 | 57 | 3 | 3 | 5 | 46 |
| 26 | 145-161-085-000 | 1.17/1.17 | Residential – High Density 5–20 Units | CSVAP | HDR/10 | HDR/25 | 29 | 12 | 1 | 1 | 1 | 9 |
| 27 | 145-161-086-000 | 1.36/1.36 | Residential – High Density 5–20 Units | CSVAP | HDR/10 | HDR/25 | 33 | 14 | 1 | 1 | 1 | 11 |
| 28 | 145-161-087-000 | 3.43/3.43 | Residential – High Density 5–20 Units | CSVAP | HDR/10 | HDR/25 | 85 | 35 | 2 | 2 | 3 | 28 |
| 29 | 145-161-088-000 | 0.99/0.99 | Residential – High Density 5–20 Units | CSVAP | HDR/10 | HDR/25 | 24 | 10 | 1 | 1 | 1 | 7 |
| 30 | 030-191-011-000 | 3.63/3.63 | Mixed-Use (2007 Castroville Cp) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 | 108 | 53 | 25 | 17 | 11 | 0 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 031-101-016-000 | 13.04/13.04 | School/ University (Fort Ord Master Plan) | FOMP | PQP-D-S | HDR/30 | 391 | 131 | 20 | 20 | 28 | 63 |
| 32 | 231-024-005-000, 231-024-011-000, 231-024-010-000, 231-024-006-000, 231-024-007-000, 231-024-001-000 | 1.56/1.56 | Residential – High Density 5–20 Units/Acre | CSVAP | HDR/5 | HDR/25 | 36 | 16 | 1 | 1 | 1 | 13 |
| 33 | 231-038-014-000, 231-038-012-000, 231-038-010-000 | 0.41/0.41 | Residential – Low Density 5–1 Acres/Unit | CSVAP | LDR/1 | HDR/25 | 9 | 5 | 0 | 0 | 0 | 5 |
| 34 | 231-038-013-000, 231-038-011-000 | 0.27/0.27 | Residential – Low Density 5–1 Acres/Unit | CSVAP | LDR/1 | HDR/25 | 6 | 3 | 1 | 1 | 0 | 1 |
| 35 | 015-012-072-000 | 3.93/3.93 | Planned Commercial/ Public/Quasi-Public (Split Land Use) | CVMP | VO-B-6-D-S-RAZ | HDR/30 | 118 | 63 | 28 | 19 | 13 | 3 |
| 36 | 169-231-002-000, 169-231-003-000, 169-231-004-000, 169-231-005-000, 169-231-006-000 | 1.22/1.22 | Commercial | CVMP | HC-D-S-RAZ | HDR/25 | 30 | 20 | 6 | 4 | 3 | 7 |
| 37 | 015-021-003-000 | 6.21/6.21 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/ 1-D-S-RAZ | HDR/30 | 186 | 89 | 29 | 19 | 12 | 29 |
| 38 | 169-031-018-000 | 4.79/3.29 | Public/Quasi-Public | CVMP | PQP-D-S-RAZ | HDR/25 and PQP-D-S-RAZ | 82 | 53 | 27 | 19 | 7 | 0 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 125-171-055-000 | 0.53/0.53 | Residential – Low Density 5–1 Acres/Unit | NCAP (Inland) | LDR/1 | HDR/25 | 13 | 9 | 4 | 3 | 1 | 1 |
| 40 | 008-151-002-000 | 26.78/26.78 | Residential – Rural Density 5 Acres+/Unit | GMPAP | RDR/ 5.1-UR-D-S | HDR/30 | 803 | 429 | 137 | 90 | 56 | 146 |
| 41 | 030-191-001-000 | 0.62/0.62 | Mixed-Use (Certified Castroville Community Plan) | NCAP (Inland) | Castroville Community Plan (MU-C) | HDR/30 | 18 | 10 | 5 | 3 | 1 | 1 |
| 42 | 221-155-021-000 | 2.63/2.63 | Residential – High Density 5–20 Units/Acre | CSVAP | HDR/8-UR | HDR/25 | 65 | 27 | 2 | 2 | 2 | 21 |
| 43 | 009-111-005-000 | 1.57/1.46 | Residential – Medium Density | CLUP – CALUP | MDR/2-D(CZ) | HDR/30 and MDR/2-D(CZ) | 43 | 23 | 4 | 4 | 5 | 10 |
| 44 | 127-012-039-000 | 14.52/8.50 | Commercial | NCAP (Inland) | LC | HDR/25 and LC | 212 | 136 | 44 | 29 | 18 | 45 |
| 45 | 008-141-002-000, 008-141-014-000 | 4.62/2.97 | Public/Quasi-Public/ Residential – Rural Density 5 Acres+/Unit (2 Parcels) | GMPAP | RDR/ 5.1-UR-D-S | HDR/30 and RDR/5.1-UR-D-S | 88 | 48 | 24 | 17 | 7 | 0 |
| 46 | 173-071-008-000 | 19.59/4.00 | Public/Quasi-Public | GMPAP | PQP-D-S | HDR/30 and PQP-D-S | 120 | 92 | 14 | 14 | 19 | 45 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | 031-131-006-000 | 98.4/15.00 | Open Space Recreation (Fort Ord Master Plan) | FOMP | PQP-D-S | HDR/30 and PQP-D-S | 450 | 60 | 9 | 9 | 13 | 29 |
| 48 | 412-073-015-000 | 16.09/16.09 | Residential – Medium Density 1–4 Units/Acre (Special Treatment Area) | CLUP – NCLUP (Coastal) | MDR/4 (CZ) | HDR/25 | 402 | 64 | 36 | 24 | 0 | 4 |
| 49 | 117-291-008-000 | 2.98/2.98 | Industrial (Pajaro General Plan Community Area) | NCAP (Inland) | HI | HDR/25 | 74 | 30 | 2 | 2 | 2 | 24 |
| 50 | 117-291-040-000 | 4.84/4.84 | Industrial (Pajaro General Plan Community Area) | NCAP (Inland) | HI | HDR/25 | 120 | 49 | 3 | 3 | 4 | 39 |
| 51 | 117-332-015-000, 117-332-014-000 | 0.69/0.69 | Commercial (Pajaro General Plan Community Area) | NCAP (Inland) | HC | HRD-25 | 17 | 5 | 1 | 1 | 1 | 2 |
| 52 | 259-011-064-000, 259-011-072-000 | 69.86/43.00 | Resource Conservation | GMPAP | RC/10-UR-D-S | HDR/30 and RC | 1,075 | 725 | 44 | 44 | 58 | 579 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53 | 031-101-018-000 | 47.52/47.52 | City Limits | N/A (City of Marina) | C-R (Marina)[3] | HDR/30 (City of Marina equivalent zoning designation is R-4) | 1,425 | 476 | 214 | 143 | 95 | 24 |
| 54 | 015-012-070-000 | 1.30/1.30 | Visitor Accommodations/ Professional Offices | CVMP | VO-B-6-D-S-RAZ | HDR/30 | 38 | 24 | 1 | 1 | 2 | 20 |
| 55 | 187-442-010-000, 187-442-011-000, 187-442-012-000, 187-442-019-000 | 4.32/4.32 | Visitor Accommodations/ Professional Offices And Residential – Low Density 5–1 Acres/Unit | CVMP | VO-D-S-RAZ, 30-ft setback from CV Rd. per CV Village Devel. Criteria (3.1), and LDR/1-D-S-RAZ | HDR/25 | 106 | 24 | 1 | 2 | 0 | 21 |
| 56 | 169-131-025-000 | 5.82/2.12 | Residential – Low Density 5–1 Acres/Unit | CVMP | LDR/1-D-S-RAZ, LDR/B-6-D-S-RAZ, To be retained as one building site pursuant to CVMP Figure 2. | HDR/25 and RC | 53 | 33 | 11 | 7 | 4 | 11 |

**Table 3-5. Opportunity Sites Inventory**

| Site No. | APN(s) | Site/ Rezone Acreages | County Land Use[1] | Planning Area | Current Zoning | Planned Rezone[2] | Theoretical Max Capacity | Reasonable Dev Capacity | Very Low | Low | Mod. | Above Mod. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 117-361-004-000 | 0.81/0.81 | Commercial (Pajaro General Plan Community Area) | NCAP (Inland) | LC | HDR/25 | 20 | 2 | 0 | 0 | 0 | 2 |
| **Total** | **—** | **585.55/444.25** | **—** | **—** | **—** | **—** | **12,497** | **4,434** | **999** | **726** | **555** | **2,154** |

Total Units from HEU6 = 4,434

Total Units Analyzed in the PEIR Based on the Theoretical Maximum Capacity = 12,497

**Notes:** AC = acreage; CVMP = Carmel Valley Master Plan; CSVAP = Central Salinas Valley Area Plan; FOMP = Fort Ord Master Plan; GMPAP = Greater Monterey Peninsula Area Plan; GSAP = Greater Salinas Area Plan; NCAP (Inland) = North County Area Plan (Inland); NCLUP (Coastal) = North County Land Use Plan (Coastal); CALUP = Carmel Area Land Use Plan; CLUP = Coastal Land Use Plan; TAP = Toro Area Plan; B = Building Site; C = Commercial; CCP = Castroville Community Plan; CGC (CZ) = Coastal General Commercial; D = Design Control; F = Farmlands; HC = Heavy Commercial; HDR = High Density Residential; HI = Heavy Industrial; LC = Light Commercial; LDR = Low Density Residential; MDR = Medium Density Residential; MU = Mixed-Use; PQP = Public/Quasi-Public; RAZ = Residential Allocation; RC = Resource Conservation; RDR = Rural Density Residential; S = Site Plan Review; UR = Urban Reserve; VO = Visitor Serving/Professional Office

This total refers to what has been included as part of the 2023–2031 Housing Element (Second CA HCD Submission).

[1] Land use provided by the County of Monterey as of March 26, 2024, as contained in the 2023–2031 Housing Element, Table 7-5 Opportunity Sites Inventory (June 2025).

[2] Planned rezone information, determination, and methodology can be found in the 2023–2031 Housing Element, Section 7.5 Capacity Analysis and Section 8 Housing Plan (June 2025).

[3] The zoning designations for sites within the City of Marina city limits are displayed as per the City of Marina's zoning regulations. C-R refers to Commercial/Multiple Family Residential District per the City of Marina Zoning Ordinance.

## 3.6 Discretionary Actions

The County is the lead agency for the project, consistent with CEQA Guidelines, Section 15065(b), and the County Board of Supervisors will consider the following discretionary actions:

- Certification of the Final PEIR and adoption of the Mitigation Monitoring and Reporting Program
- Approval of the General Plan Sixth Cycle Housing Element (2023–2031) Update
- Amendments to the 2010 General Plan:
  - Circulation Element
  - Conservation and Open Space Element
  - Land Use Element
  - Public Services Element
  - Carmel Valley Master Plan
  - Central Salinas Valley Area Plan
  - Fort Ord Master Plan
  - Greater Monterey Peninsula Area Plan
  - Greater Salinas Area Plan
  - North County Area Plan
  - Toro Area Plan
- Amendments to the County Code (Title 20, coastal zoning and Title 21, inland zoning) including: Amendment to Monterey County Code for consideration of adding a by-right housing ordinance
- Amendments to LCP components:
  - Carmel Area Land Use Plan and Coastal Implementation Plan (CIP)
  - North County Land Use Plan and CIP
- Statement of Reasons to Permit the Proposed Use and Eliminate Access to Mineral Resources of Regional Significance
- Other amendments as necessary to implement the HEU6 and comply with state law

Refer to Appendix B for a non-exhaustive list of plans and policies that need to be modified as part of the project.

### 3.6.1 Other Agency Approvals

Under CEQA, state and local agencies other than the lead agency that have discretionary authority over a project or aspects of a project are considered responsible agencies. The following responsible agencies are included as part of the project:

- California Coastal Commission – Approval of LCP amendments
- Monterey County Airport Land Use Commission
- Memorandum of Understanding (MOU) with the University of California and City of Marina

In addition, implementation of the HEU6 may require approvals by the County's Agricultural Advisory Committee, Board of Forestry and Fire Protection, California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and California Department of Toxic Substances Control, among others.

## 3.7 Intended Uses of the Program Environmental Impact Report

CEQA Guidelines, Section 15168(c), states that subsequent activities in a program must be examined in light of the PEIR to determine if an additional environmental document must be prepared. This PEIR assumes that future development consistent with the HEU6 could be subject to further environmental review at the time specific projects are proposed. The analysis of future actions would be based on the existing conditions on the site and within the vicinity when an action is proposed and would consider any updated information relevant to the environmental analysis of the future projects (e.g., changes to the environmental setting).

Pursuant to CEQA Guidelines, Section 15168, this PEIR will facilitate streamlined CEQA review for future actions that would implement the HEU6, including but not limited to rezoning to update the Zoning Ordinance for the HEU6. This PEIR will also facilitate the streamlined review of future development projects consistent with the HEU6 in accordance with the applicable provisions of CEQA and the CEQA Guidelines. This PEIR assumes that the HEU6 will require rezoning concurrently with adoption of the HEU6 and analyzes environmental impacts from rezoning.

The County's approach to working with applicants to use/tier from this PEIR to streamline CEQA review for future development projects is set forth in Section 3.7.7, Findings for Future Residential Projects.

### 3.7.1 Tiering Opportunities

California Public Resources Code (PRC), Section 21068.5, states, "Tiering" or "tier" means the coverage of general matters and environmental effects in an environmental impact report prepared for a policy, plan, program or ordinance followed by narrower or site-specific environmental impact reports which incorporate by reference the discussion in any prior environmental impact report and which concentrate on the environmental effects which (a) are capable of being mitigated, or (b) were not analyzed as significant effects on the environment in the prior environmental impact report.

This PEIR is intended to assist future applicants to streamline future projects by allowing a lead agency in the region to tier from, as appropriate, pursuant to CEQA Guidelines, Sections 15152

and 15385, and PRC Sections 21068.5 and 21093–21094. A later EIR tiering from this PEIR, assuming it is certified by the County Board of Supervisors, would not be required to examine effects that (1) were mitigated or avoided in this PEIR, and (2) were examined at a sufficient level of detail in this PEIR to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project (California Public Resources Code, Section 21094).

### 3.7.2 California Public Resources Code, Section 21083.3, and CEQA Guidelines, Section 15183, Exemption

PRC Section 21083.3 provides a statutory exemption for projects that are consistent with density for which an EIR was certified. Consistency means that a project's proposed density is equal to or less than the density identified for a project site in the General Plan, Community Plan, or zoning action (e.g., in this case, the HEU6), and that a project complies with any density-related standards in the plan or zone. The regulations for the Section 21083.3 statutory exemption are described in CEQA Guidelines, Section 15183. In accordance with these requirements, this PEIR will support streamlined environmental review for future activities that are both consistent with, and that would implement, the HEU6's policies following its adoption (refer to discussion of the streamlined review process in Section 3.7.4, Streamlined Review). Such activities could include both ordinances amending changes to zoning and other land use regulations and approval actions for individual development projects.

CEQA Guidelines, Section 15183(a), states that "CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies."

Applicants would be responsible for implementing applicable mitigation measures, relevant policies, uniformly applied development policies and standards as part of the County's policies, ordinances, and programs and those outlined in this PEIR to streamline future projects using the CEQA Guidelines, Section 15183, exemption. If future projects implementing the HEU6 require the incorporation of mitigation measures from this PEIR, the County is required to make a finding at a public hearing regarding whether the feasible mitigation measures will be implemented, pursuant to CEQA Guidelines, Section 15183(e)(2).

### 3.7.3 By-Right Development

Upon certification of the PEIR and approval of the HEU6, the following types of housing development will be allowed by right, pursuant to the provisions in the HEU6 implementation program as summarized below:

- **H-2.D. By-Right Approval on Reuse of Prior Housing Opportunity Sites.**[5] This program will permit residential developments with 20 percent or more of the units designated as affordable to lower-income households "by right," per California Government Code, Section 65583.2(i), on Opportunity Sites 11, 26, and 30, representing reuse of sites identified in previous Housing Element cycles.
- **H-2.H. By-Right Approval for Affordable Housing Development.** This program will establish as an allowed ("by-right") use in zoning districts where housing is allowed, subject to objective standards and criteria, the following affordable housing development:
  - 100 percent affordable housing developments on sites identified as opportunity sites.
  - 100 percent affordable housing developments on properties within 2010 General Plan designated growth areas (Community Plan Areas, Affordable Housing Overlay zones, Rural Centers and Community Areas).
  - On lands owned by religious organizations and non-profit colleges and universities that meet the provisions of SB 4 (2023).
- **H-3.A. Rezoning for Higher-Density Residential Development.** This program will permit owner-occupied and rental multi-family uses "by right" for developments in which 20 percent or more of the units are deed-restricted as affordable to lower-income households and achieve a minimum project density of 20 dwelling units per acre. The maximum project density shall include either 25 dwelling units per acre in HDR/25 or up to 30 dwelling units per acre in HDR/30 only in areas where public sewer service and water is available. This program further establishes a two-tier entitlement process:
  - **Tier 1:** Projects that achieve a minimum density of 20 dwelling units per acre and a minimum of 20 percent of the units to be affordable to lower-income households may be permitted through a ministerial approval process.[6]
  - **Tier 2:** Projects that achieve a density less than 20 dwelling units per acres or less than 20 percent of the units affordable to lower-income households may be permitted through a discretionary approval process.

[5] "By-right approval" is used in the HEU6 program language and has been vetted and approved by the CA HCD. However, the more accurate terminology would be "by-right uses." While it is common for by-right approval and by-right uses to be referred to interchangeably by others, the County does not want this inconsistent usage to cause confusion to its intended meaning in this case.

[6] This language is included in the HEU6 program. See subsequent discussion in this section regarding "use by right" and findings required as part of the Subdivision Map Act.

By-right development is defined by California Government Code, Section 65583.2(i):

> (i) For purposes of this section and Section 65583, the phrase "use by right" shall mean that the local government's review of the owner-occupied or multifamily residential use may not require a conditional use permit, planned unit development permit, or other discretionary local government review or approval that would constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Any subdivision of the sites shall be subject to all laws, including, but not limited to, the local government ordinance implementing the Subdivision Map Act. A local ordinance may provide that "use by right" does not exempt the use from design review. However, that design review shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Use by right for all rental multifamily residential housing shall be provided in accordance with subdivision (f) of Section 65589.5.

The County cannot require a conditional use permit, a planned unit development permit, or other discretionary local government review or approval that would constitute a "project" for the purposes of CEQA (PRC Section 21100). This means that the County cannot require CEQA review for a use that is allowed by right.

However, any subdivision of the sites shall be subject to all laws, including but not limited to the local government ordinance implementing the Subdivision Map Act. California Government Code, Section 66474, lists the findings that must be made to deny a map, all of which are discretionary.[7] Therefore, although a "use by right" is not a project subject to CEQA, a tentative map, tentative parcel map, or parcel map are discretionary projects and subject to CEQA. State law and CEQA case law do not provide insight into this conflict pitting "use by right" that does not constitute a project against the discretionary nature of tentative maps, tentative parcel maps, and parcel maps pursuant to the Subdivision Map Act.

The County interprets this apparent conflict to mean that the use itself is by right, meaning the County decision-makers can neither require a permit or CEQA nor deny the use itself. The decision-makers can, however, evaluate the tentative map, tentative parcel map, or parcel map and can condition, modify, or deny the map (but not the use type, which is residential in this case).

The CA HCD prepared a Housing Accountability Act Housing Law Fact Sheet that explains limitations to a local government's ability to disapprove, condition, or reduce the density of housing development projects. Therein, the CA HCD identifies two key provisions of the act:

[7] Pursuant California Government Code, Section 66474, a legislative body shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the required findings, including that the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans, that the site is not physically suitable for the proposed density of development, and that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

- **Provision 1.** Applies to All Housing Development Applications
- **Provision 2.** Applies Only to Certain Affordable Housing (including Farmworker Housing), Emergency Shelters, and Smaller Housing Projects

Provision 1 is a general provision that applies to all housing development applications, both market-rate and affordable, that are consistent with the objective General Plan, zoning, design, and subdivision standards for the site that were in effect at the time that the project application was deemed complete. "Deemed complete" means that the applicant has submitted a preliminary application pursuant to California Government Code, Section 65941.1, or if the applicant has not submitted a preliminary application, has submitted a complete application pursuant to Section 65943. A housing development proposal that meets those criteria cannot be disapproved or approved with a condition that reduces the density of the project unless the jurisdiction makes both of the following findings:

- **Finding 1: Specific, Adverse Impact on Public Health or Safety.** That the proposed development would have a "specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density." Specific, adverse impact means a significant, quantifiable, direct, and unavoidable impact based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete, and
- **Finding 2: No Possible Mitigation.** That "there is no feasible method to satisfactorily mitigate or avoid the adverse impact."

Provision 2 applies to a narrower category of projects: emergency shelters and housing developments, including farmworker housing, that are affordable to extremely low/very low-, low-, or moderate-income households or certain smaller housing projects. A housing development project must meet one of the following criteria to be covered by this provision:

- **Lower-Income or Moderate-Income Units.** 100 percent of the units are deed-restricted for lower-income households (includes very low-income and low-income) or moderate-income households.
- **Extremely Low-Income Units.** 7 percent of the total units (excluding density bonus) are deed-restricted for extremely low-income households.
- **Very Low-Income Units.** 10 percent of the total units (excluding density bonus) are deed-restricted for very low-income households.
- **Lower-Income Units.** 13 percent of the total units (excluding density bonus) are deed-restricted for lower-income households.
- **Smaller Housing Projects.** 10 or fewer units (excluding density bonus) on a site that is less than 1 acre and has a minimum density of 10 units per acre; can include 100 percent market-rate projects.

Under the limits of Provision 2, a jurisdiction can only deny a qualifying housing development project or impose conditions on that project that render it infeasible if it can make one of several specified findings.[8]

To implement by-right development, the County will consider a by-right housing ordinance with objective design standards and environmental protection measures applicable to future qualifying projects. Future projects consistent with the HEU6 would be processed using one of the two streamlining pathways described below and throughout this PEIR.

### 3.7.4 Streamlined Review

To implement Objective 7 and the HEU6, the County would provide two streamlined processing pathways:

- **Objective Process.** This streamlining pathway for qualifying by-right development would be subject to the by-right housing ordinance, objective design standards, environmental protection measures established by ordinance, and other objective requirements and standards.
- **Consistency Process.** This streamlining pathway would be a discretionary process applying the streamlining process set forth in PRC Section 21083.3 and a CEQA Guidelines, Section 15183, exemption.

The County intends this two-tiered implementation process to streamline future residential development consistent with the HEU6 while ensuring both CEQA project-level compliance and implementation of applicable mitigation measures identified in this PEIR. To facilitate by-right uses under the HEU6 implementation programs (H-2.D, H-2.H, and H-3.A) described above and other future state law that requires by-right housing programs, the County will consider adopting a by-right housing ordinance that includes zoning, environmental, and design review standards and affordability requirements (refer to Section 3.7.3). Once the by-right housing ordinance is adopted, qualifying projects under the Objective Process will be eligible to use the by-right housing regulations to be processed with objective standards without being subject to the County's independent judgment (i.e., would be processed using objective standards). The Objective Process will function like a ministerial process pursuant to CEQA (refer to Section 3.7.6, Discretionary

[8] The findings include: (1) the region has adopted a Housing Element and has already met or exceeded its RHNA for all income groups; (2) specific, adverse impact on public health or safety; (3) the denial or conditions are necessary to comply with state or federal law, and there is no other feasible alternative to the denial or conditions; (4) the housing is proposed on land zoned for agricultural or resource preservation, and either (a) the land on at least two sides surrounding the property is currently used for agricultural or resource preservation, or (b) there are not adequate water or wastewater facilities available to serve the project; (5) the jurisdiction has an adopted, substantially compliant Housing Element and the proposed housing development is inconsistent with both the zoning code and General Plan land use designation for the site, and either (a) the project is not proposed on a site or candidate rezone site identified in the Housing Element for extremely low/very low-, low-, or moderate-income households at the density specified in the Housing Element, or (b) the project is an emergency shelter and the jurisdiction has zoned for by-right emergency shelters or zoned sufficiently to accommodate emergency shelters as identified in the Housing Element; (6) the jurisdiction's Housing Element is out of compliance, and the project (a) does not qualify as a builder's remedy project, and (b) is not consistent with the objective General Plan, zoning, design, and subdivision standards ().

Versus Ministerial); however, as explained in Section 3.7.3, the tentative map, tentative parcel map, or parcel map associated with the by-right development require discretion to make findings.

Projects streamlining under the Objective Process must be eligible for by-right approval. Such approval will be subject to both the requirements described in the HEU6 Implementation Programs H-2.D, H-2.H, and H-3.A and to other future state law that requires the County to process certain projects by right. Additionally, the project must meet the environmental and objective design requirements established in the by-right housing ordinance upon the ordinance's adoption and as subsequently amended.[9]

Projects that do not meet the requirements to process objectively under the Objective Process could use streamlining under the Consistency Process through a future project-specific PRC Section 21083.3 and CEQA Guidelines, Section 15183, exemption, as described in Section 3.7.2, California Public Resources Code, Section 21083.3, and CEQA Guidelines, Section 15183, Exemption. For instance, if a project would be allowed by right but would not meet the requirements of the by-right housing ordinance, then it can still undergo a streamlined CEQA process under the Consistency Process. Figure 3-1, Streamlining Pathways: Objective Process and Consistency Process Flow Chart, shows the process for projects that streamline environmental review using both pathways.

In addition, other discretionary projects that do not meet requirements to allow the County to process them under either the Objective Process or Consistency Process may be reviewed by the appropriate environmental documents and still streamline review should the County find their impacts to be within the scope of the impacts analyzed in this PEIR (refer to Section 3.7.7).

#### 3.7.4.1 Objective Process and Consistency Process Mitigation

Projects that qualify for the Objective Process may not require further environmental review under CEQA. Nevertheless, they would still be required to implement objective, generally applicable measures specific to the Objective Process identified in this PEIR, as applicable, to reduce potentially significant impacts. Because the County will be unable to exercise discretion when reviewing these projects, mitigation identified in this PEIR for Objective Process projects would be implemented through the by-right housing ordinance as objective standards, conditions of approval, or other generally applicable mandatory implementation measures. Therefore, to the extent details are known about future by-right development, this PEIR includes objective project requirements, objective design standards, and impact reduction measure suggestions to be included in the by-right housing ordinance.

[9] Opportunity Site 53 is in the City of Marina. The project requires an MOU between the County, City of Marina, and University of California that will guide compliance with the HEU6 and the rezone. The City of Marina and University of California are not subject to the County's codes or requirements; therefore, the by-right housing ordinance would not apply. Unless and until an MOU requires compliance with the by-right housing ordinance, Opportunity Site 53 cannot use the Objective Process. However, Opportunity Site 53 may still be processed via the Consistency Process, relying on this PEIR to streamline environmental review.

The Consistency Process will differ from the Objective Process in some instances, as the County and other responsible agencies will retain discretionary authority and the ability to condition projects, modify projects, or deny projects based on independent judgment and subjective standards and mitigation. Mitigation can be applied through the PRC Section 21083.3 and CEQA Guidelines, Section 15183, exemption process and adopted at a public hearing (CEQA Guidelines, Section 15183[e][2]).

This PEIR identifies the environmental protection measures and standards to be included in the by-right housing ordinance using the label format **MM-[Issue Area]-[OBJ or CONS]-[number]**. "MM" stands for Mitigation Measure. The issue area is abbreviated (for example, GHG for greenhouse gas emissions). "OBJ" refers to the Objective Process and "CONS" to the Consistency Process. The final number indicates the mitigation sequence within that chapter (1, 2, 3, etc.). For example, MM-GHG-OBJ-1 is the first greenhouse gas emissions mitigation measure under the Objective Process. Note that each mitigation measure is intended for PEIR/programmatic-level application. It will be broadly applicable to projects to which it applies. To the extent that project-specific level mitigation is required, the project will become a discretionary project, not subject to the Objective Process. However, it may, under certain conditions, be subject to the Consistency Process or, to the extent the County finds the project to be within the scope of the impacts analyzed by this PEIR, to streamlined environmental review.

### 3.7.5 By-Right Housing Ordinance

The County's draft by-right housing ordinance requires:

- Inclusion of one of the Housing Element programs listed in Section 3.7.3 or a state law that requires a by-right process;
- Deed-restricted affordable units required of the program or state law; and
- Adherence to all objective design standards, codes, environmental protection measures, and other requirements.

The County Board of Supervisors will consider adopting the by-right housing ordinance to apply to projects that process using the Objective Process. The Draft County of Monterey By-Right Housing Ordinance is attached as Appendix C to this PEIR. Appendix C includes a Draft Zoning Clearance Ordinance as an attachment.

The by-right housing ordinance includes objective[10] design standards that require little to no judgment by the County and include measurable objective criteria. Examples of objective design standards include building form, architecture, site design, parking, and lighting. The County will

[10] A definition of "objective" is included in California Government Code. Section 65589.5(h)(7): "Objective" means involving no personal or subjective judgment by a public official and being uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant and the public official prior to submission of an application.

consider adopting the objective design standards in the Draft County of Monterey Model Objective Design Standards (Appendix D). The Model Objective Design Standards include general standards that County staff and decision-makers will use to objectively evaluate a project required by right using measurable standards. The Model Objective Design Standards will be revised following adoption of the HEU6 and certification of the PEIR to fit community and place-specific design standards, architectural style, height, and other unique neighborhood designs.

The by-right housing ordinance includes mitigation measures evaluated in this PEIR and listed with the abbreviation "OBJ," short for Objective Process. These "OBJ" mitigation measures will be included in the by-right housing ordinance as environmental protection measures and standards that must be satisfied by ordinance.

### 3.7.6 Discretionary Versus Ministerial

CEQA Guidelines, Section 15357, defines a "discretionary" project, in relevant part, as "a project which requires the exercise of judgement or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, regulations, or other fixed standards."

CEQA Guidelines, Section 15369, defines a "ministerial" decision, in relevant part, as involving little or no personal judgment by the County as to the wisdom or manner of carrying out the project. The key question is whether the County can approve a project solely by reference to objective, applicable regulations, ordinances, or other fixed standards, without subjective judgment.

The courts apply a "functional test" to determine whether a CEQA project is "discretionary" or "ministerial." The test looks to a lead agency's legal authority to shape the project to meet environmental concerns (e.g., condition a project to avoid environmental concerns, including require mitigation measures). Under this test, an agency approval is "discretionary" if the County has authority to modify the project or deny approval for environmental reasons; it is "ministerial" if the applicant can legally compel the agency to approve it without changes to mitigate its impacts (Practice Under the Environmental Quality Act, 2d ed. Cal CEB, Section 4.25).

Under CEQA, a project is ministerial if the law (or in this case, the County's by-right housing ordinance) governing the County's approval decision does not authorize the County to, as a condition of approval, require project changes or mitigations to address environmental concerns. In other words, if the County does not have authority to deny a project or to modify it in response to environmental impacts, the action is ministerial. The County merely applies the law to the facts as presented, using no special discretion or judgment in reaching a decision. Ministerial decisions involve only the use of fixed standards or objective measurements, and the County cannot use personal, subjective judgment in deciding whether or how a project should be carried out (CEQA

Guidelines, Section 15369). The County may be required to answer "yes or no" questions to confirm if a project qualifies for objective processing (e.g., Is the project in a state responsibility area for fire hazards? Is the project located on steep slopes? Does the project avoid sensitive resources?). This PEIR is structured to include mitigation measures that will become objective standards and measures in the by-right housing ordinance that will apply generally to future Objective Process projects. By-right housing ordinance avoidance measures are included in this PEIR where appropriate.

### 3.7.7 Findings for Future Residential Projects

The Objective Process and Consistency Process require the County to make a finding that the future project's impacts are within the scope of this PEIR, which means the impacts of future projects are the same or less intensive than identified in this PEIR.

CEQA Guidelines, Section 15168(c), requires an examination of "later activities in the program" to determine whether an additional environmental document must be prepared (refer to Section 3.7, Intended Uses of this PEIR). For instance, in evaluating a future project that implements the HEU6, along with future residential development projects, the County would be required to determine if the project would result in effects that were not examined in this PEIR. Under CEQA Guidelines, Section 15162, the County is required to determine if a future project would have new or more severe significant effects not disclosed in this PEIR. If the County finds no new or more severe effects, then a Subsequent EIR (CEQA Guidelines, Section 15162) or Supplemental EIR (CEQA Guidelines, Section 15163) is not required. Instead, the County would be able to approve the future project as being within the scope of the impacts analyzed in this PEIR.

Both the Objective Process and Consistency Process will require the County to prepare findings for future residential development processing under the HEU6 to document whether a project's impacts are within the scope of the impacts analyzed by this PEIR:

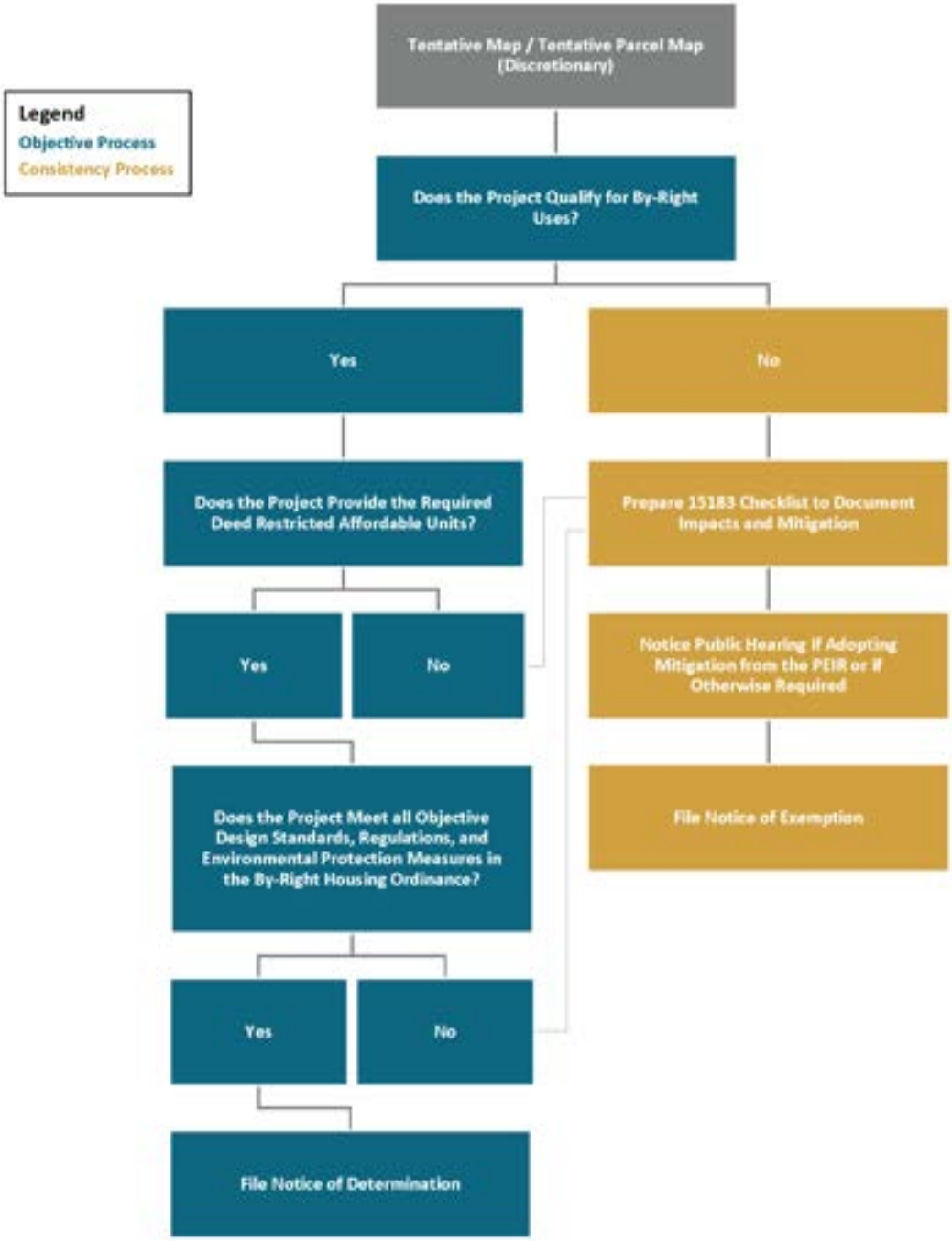
- **Objective Process.** This process will require the County to prepare an addendum pursuant to CEQA Guidelines, Section 15164, to document that a project's impacts are within the scope of this PEIR and to make appropriate findings. If a future project can comply with the requirements of the by-right housing ordinance, including all feasible environmental mitigation and design features, it will be assumed to be within the scope of this PEIR's analysis. The decision-maker for the project (e.g., County Planning Commission or Board of Supervisors) will adopt this "within the scope" finding as part of consideration of the by-right use.
- **Consistency Process.** This process will require the County to prepare a project-specific CEQA Guidelines, Section 15183, exemption checklist to address the questions in

CEQA Guidelines, Section 15183(b), a document similar to an Initial Study checklist.[11] PRC Section 21083.3 and CEQA Guidelines, Section 15183, require a similar "within the scope" finding as CEQA Guidelines, Section 15168, that focuses on whether the project has effects that are peculiar to the project or its site. In this context, "peculiar" means a new significant impact not identified in this PEIR. These findings are functionally equal to those the County must make pursuant to CEQA Guidelines, Section 15168(c).

[11] CEQA Guidelines Section 15183 requires the County to limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis are peculiar to the project or the parcel on which the project would be located, were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent, are potentially significant off-site impacts or cumulative impacts not discussed in this PEIR, or are previously identified significant effects which, as a result of substantial new information which was not known at the time this PEIR was certified, are determined to have a more severe adverse impact than discussed in this PEIR.

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**Figure 3-1. Streamlining Pathways: Objective Process and Consistency Process Flow Chart**



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# Chapter 4 Environmental Analysis

This chapter contain a discussion of the potential environmental effects from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project), as described in Chapter 3, Project Description.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## Scope of the Environmental Impacts Analysis

The County determined that some or all components of the following California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist issue areas would not be significantly affected by or would not affect the project. These issue areas are evaluated in Chapter 7, Effects Found Not to Be Significant:

- Geology and Soils
- Population and Housing

In accordance with Appendix G of the CEQA Guidelines, the potential environmental effects from the project are analyzed in this chapter for the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources

- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

## Format of the Environmental Impact Analysis

The following sections compose each of the 19 issue area sections in Sections 4.1 through 4.19 of this PEIR.

### Regulatory Setting

This section provides a summary of regulations, plans, policies, and laws that are applicable to the project and relevant to each environmental issue area at the federal, state, and regional/local levels.

### Environmental Setting

This section describes the current environmental setting of each environmental issue area. According to CEQA Guidelines, Section 15125, an Environmental Impact Report (EIR) must include a description of the existing physical environmental conditions within the project vicinity to provide the "baseline conditions" against which project-related impacts are compared. Normally, the baseline conditions are the physical conditions that exist when the Notice of Preparation (NOP) is published. The NOP for the project was published on October 21, 2024, and the baseline conditions in this PEIR are generally taken from this time period. However, the CEQA Guidelines and applicable case law recognize that the date for establishing an environmental baseline cannot always be rigid. Physical environmental conditions may vary over a range of time periods; thus, the use of environmental baselines that differ from the publication date of the NOP is reasonable and appropriate when conducting the environmental analyses. Some sections rely on various data to establish an applicable baseline. For example, in Sections 4.3, Air Quality; 4.4, Biological Resources; 4.5, Cultural Resources; 4.16, Transportation; and 4.18, Utilities and Service Systems, available data was months and sometimes several years old. Therefore, projections regarding how those conditions might have changed were incorporated into the PEIR sections and corresponding technical reports.

### Method of Analysis

This section provides a description of the method used to analyze the potential impacts of the project on the evaluated environmental issue areas.

### Thresholds of Significance

This section identifies the criteria used to determine if potential environmental effects are significant. The thresholds of significance used in this analysis were primarily based on

Appendix G of the CEQA Guidelines. This section defines the type, amount, and extent of impact that would be considered a significant, adverse change in the environment. Some thresholds of significance, such as those used in Sections 4.3, Air Quality; 4.6, Energy; 4.8, Greenhouse Gas Emissions; 4.13, Noise; and 4.16, Transportation, are quantitative, while others are qualitative based on the location and environmental conditions of the site (e.g., soil conditions). The thresholds of significance are intended to assist the reader in understanding how and why this PEIR reaches a conclusion that an impact is less than significant, potentially significant, or significant and unavoidable or if no impact would occur.

## Project Impacts and Mitigation

This section describes the potential environmental impacts of the project and, based on the thresholds of significance, concludes if the environmental impacts would be less than significant, potentially significant, or significant and unavoidable or if no impact would occur. This format is consistent with the summary of impacts in Table ES-1, Summary of Environmental Impacts and Mitigation Measures, which forms the basis of the Mitigation Monitoring and Reporting Program. For each impact criterion, applicable thresholds of significance are identified, and potential impacts are discussed in the Impact Analysis section. Mitigation measures are also included and discussed when applicable.

**Impact Analysis.** The analysis of environmental impacts considers both the construction and operational phases associated with implementation of the project. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, long-term, short-term, on-site, and off-site impacts are addressed, as appropriate, for the issue area being analyzed. This PEIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- **No Impact:** "No impact" refers to implementation of the project having no impact on environmental conditions.
- **Less than Significant:** "Less than significant" refers to two conditions:
  - Impacts resulting from implementation of the project that are not likely to exceed the defined standards of significance.
  - Potentially significant impacts before implementation of mitigation measures. If implementation of the specified mitigation measures would reduce the potentially significant impact to a level that does not exceed the defined standards of significance, the impact is considered less than significant.

- **Potentially Significant:** "Potentially significant" refers to impacts resulting from implementation of the project that may exceed defined standards of significance before mitigation is considered.
- **Significant and Unavoidable:** "Significant and unavoidable" refers to impacts resulting from implementation of the project that cannot be eliminated or reduced to below the defined standards of significance or a less than significant level through implementation of feasible mitigation measures.

A "significant effect" is defined by Section 15382 of the CEQA Guidelines as "a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment . . . [but] may be considered in determining if the physical change is significant."

**Significance of Impact**. This section identifies the level of significance of project impacts before mitigation measures are implemented.

**Mitigation Measures.** Section 15126.4 of the CEQA Guidelines requires an EIR to "describe feasible measures which could minimize significant adverse impacts." The CEQA Guidelines define "feasibility" as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, social, technological, legal, or other considerations. The Mitigation Measures section discusses mitigation measures that could reduce the severity of potentially significant or significant and unavoidable impacts identified in the Impact Analysis section.

**Significance of Impact After Mitigation.** This section identifies the level of significance of project impacts after mitigation measures are implemented.

## Development Assumptions for Impact Analyses

The HEU6 identifies a reasonable buildout capacity of up to 5,897 housing units, which includes:

- 4,434 units on 56 opportunity sites;
- 1,117 units on six pipeline sites (credited toward the Regional Housing Needs Allocation [RHNA]); and
- 346 accessory dwelling units (ADUs) (credited toward RHNA).

This reasonable buildout capacity includes a conservative buffer to address "no net loss" provisions over the 8-year planning horizon. This buffer is included to ensure that the County retains adequate housing supply throughout the Sixth Cycle (2023–2031) planning period, even if some sites do not develop.

The 1,117 units on pipeline sites are credited toward meeting the Sixth Cycle RHNA target; however, their provision is not dependent on the outcome of the HEU6, because development on these sites is currently being processed by the County independent of the HEU6. Therefore, pipeline sites are not analyzed in the project impact analyses in this PEIR. Instead, they are included in the cumulative impact analyses. ADUs can be developed independent of the HEU6 in areas zoned for single-family or multi-family residential use. ADUs are credited toward the County's RHNA target based on the number of ADU permits issued previously. They are not included the PEIR's project impact analysis.[1] Refer to Table 3-2, Capacity Determination, which identifies pipeline sites and ADUs as "Alternative Methods to Meet the RHNA (credit)" pursuant to California Government Code, Section 65583.1. For purposes of this PEIR analysis, the potential impacts focus on the physical environmental changes associated with the changes proposed on the 56 opportunity sites identified in the HEU6.

The assumptions used in each impact analysis are discussed in the Method of Analysis section (refer to Section 4.1.2.3) of each section in this chapter. Depending on the threshold of significance for each impact, the analysis may assume buildout of the theoretical maximum capacity of 12,497 housing units, a reasonable development capacity buildout of 4,434 housing units, or the location of the opportunity site parcels—where site-specific physical conditions, like soil or vegetation conditions, not buildout, control the impact analysis. These scenarios and assumptions are discussed in fuller detail below.

### Theoretical Maximum Capacity

As described in Section 3.5.2, Rezoning and Split Zoning, of Chapter 3, all opportunity sites included in the project will be rezoned to either HDR/25 (High Density Residential at 25 dwelling units per acre) or HDR/30 (High Density Residential at 30 dwelling units per acre) to create enough capacity to meet the state-required RHNA target.

By rezoning the opportunity sites to HDR/25 and HDR/30, a theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites is technically permitted. However, development of 12,497 new housing units is highly unlikely based on historical building trends and market demand in UMC.[2] Therefore, it is unreasonable to assume buildout of development at the theoretical maximum capacity and the associated height and scale that would be required to achieve this many units in the UMC during the Sixth Cycle Housing Element planning period (2023–2031).

[1] The ADU number was calculated by multiplying the number of ADUs developed in the UMC in the previous 5-year average by the 6 years remaining in the 6th Cycle and applying the affordability breakdown of the total 5-year average for each of the income levels, and no specific sites are identified for the ADUs. As shown in Table 3-2, the County is projecting no very low-income and moderate-income ADUs because no very low- or moderate-income ADUs were developed in UMC over the last 5 years.

[2] For instance, building permits for only 1,848 housing units were issued in UMC during the Fifth Cycle Housing Element planning period.

For the purposes of this PEIR's CEQA analysis, specific sections of the PEIR evaluate the maximum theoretical buildout scenario of 12,497 units permitted under the proposed HDR/25 and HDR/30 zoning designations across 56 opportunity sites (rather than the reasonable development capacity of 4,434 units on the same 56 opportunity sites as stated in the HEU6). This upper-bound scenario was used for technical analyses associated with the transportation modeling for vehicle miles traveled (VMT), including air emissions (Section 4.3, Air Quality), greenhouse gas emissions (Section 4.8, Greenhouse Gas Emissions), noise (Section 4.13, Noise), and VMT (Section 4.16, Transportation). The maximum theoretical buildout scenario was assumed for these analyses to ensure the PEIR fully discloses the potential environmental consequences of the project. Using this assumption ensures that the PEIR analyzes the highest intensity of development legally permissible under the proposed zoning. This approach provides conservative, worst-case disclosure of impacts for the technical analyses that require conservative modeling for legally defensibility.

While the HEU6 reflects what the County anticipates will realistically be constructed based on market trends and site-specific constraints, the PEIR uses the higher theoretical density, where applicable, to ensure that all potential environmental impacts are accounted for, although the County fully acknowledges that the buildout at these maximum permitted densities on opportunity sites is implausible. Because it is an unreasonable expectation of future growth, the theoretical maximum capacity is not used for the majority of analyses in this chapter of this PEIR. The impact analyses in the remaining sections (not listed above) assume a reasonable buildout capacity of 4,434 housing units on 56 opportunity sites or the location of opportunity site parcels or a combination of both, where applicable, as described further below.

### Reasonable Development Capacity

Several analyses in this PEIR assume a reasonable buildout capacity of 4,434 housing units on 56 opportunity sites, as identified in the HEU6. This reasonable buildout capacity represents a more reasonable assumption of development based on historical building trends and market demand in UMC and still includes a conservative buffer to address "no net loss" provisions over the 8-year planning horizon.

### Location of Opportunity Site Parcels

Other sections of this PEIR evaluate the location of opportunity site parcels, where applicable, based on the significance thresholds for each environmental resource. For instance, the thresholds of significance for Section 4.2, Agriculture and Forestry Resources, are based on the location and soil or vegetation conditions of each site, rather than the number of housing units proposed. Therefore, the impact analysis in Section 4.2 evaluates each of the opportunity site parcels to determine impacts on agriculture and forestry resources.

## Mitigation Approach

As described in Chapter 3, the County would include two streamlining pathways to implement Objective 7 and the HEU6. The first is the Objective Process, which includes by-right uses that would be subject to the by-right housing ordinance, which will include objective design standards, environmental protection measures established by ordinance, and other objective requirements and standards. The second pathway, the Consistency Process, would be a discretionary process applying the streamlining process set forth in California Public Resources Code, Section 21083.3, and CEQA Guidelines, Section 15183.

Projects that qualify for the Objective Process would be required to implement objective, generally applicable measures specific to the Objective Process identified in this PEIR, as applicable, to reduce potentially significant impacts. Because the County will be unable to exercise discretion when reviewing these projects, mitigation identified in this PEIR for the Objective Process projects would be implemented through the by-right housing ordinance as objective standards, conditions of approval, or other mandatory implementation measures. The Consistency Process will differ from Objective Process in some instances as the County and other responsible agencies will retain discretionary authority and the ability to condition projects, modify projects, or deny projects based on independent judgment and subjective standards and mitigation. Mitigation can be applied through the CEQA Guidelines, Section 15183, exemption process and adopted at a public hearing (CEQA Guidelines, Section 15183[e][2]).

The environmental protection measures and standards to be included in the by-right housing ordinance are indicated in this PEIR using the label format MM-[Issue Area]-[OBJ or CONS]-[number]. “MM” stands for Mitigation Measure. The issue area is abbreviated (for example, GHG for greenhouse gas emissions). “OBJ” refers to the Objective Process and “CONS” to the Consistency Process. The final number indicates the mitigation sequence within that chapter (1, 2, 3, etc.). For example, MM-GHG-OBJ-1 is the first greenhouse gas emissions mitigation measure under the Objective Process.

### Properly Deferred Mitigation Measures

CEQA Guidelines, Section 15126.4(a)(1)(B), provides that formulation of mitigation measures “shall not be deferred until some future time.” Regardless, when it is “impractical or infeasible” to include specific details of the proposed mitigation during the project’s environmental review, the agency may defer development of those details provided it:

1. Commits itself to the mitigation;
2. Adopts specific performance standards the mitigation will achieve, and
3. Identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure.

When the County commits to "eventually devising" specific performance standards set forth at the time of project approval, it can rely on this commitment "as evidence that specific impacts will in fact be mitigated" (Sacramento Old City Ass'n v City Council (1991) 229 Cal.App.3d 1011, 1029).

Mitigation measures in this PEIR include

- A commitment to the mitigation;
- Performance standards the mitigation will achieve; and
- Actions that can feasibly achieve the performance standards.

## Cumulative Impacts

CEQA requires that EIRs analyze cumulative impacts in addition to project impacts. In accordance with CEQA, the lead agency's cumulative impacts analysis must consider both the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. Further, the discussion should be "guided by the standards of practicality and reasonableness" (CEQA Guidelines, Section 15130[b]). According to Section 15355 of the CEQA Guidelines, "cumulative impacts" are defined as follows:

> Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
> (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the CEQA Guidelines clarifies that a "cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

In addition, Section 15130(a) of the CEQA Guidelines requires that EIRs analyze a project's potential cumulative impacts when the project's incremental effect is "cumulatively considerable." As further clarified by Section 15065 of the CEQA Guidelines, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Therefore, an EIR's cumulative impact analysis must evaluate and determine whether a project's impacts would be significant when considered in combination with the

potential impacts of past, present, and future reasonably foreseeable projects. The project's impacts would be cumulatively significant if they would make a cumulatively considerable contribution to those impacts. The CEQA Guidelines indicate that, where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, it need not consider the effect significant but shall briefly describe the basis for its conclusion. The CEQA Guidelines allow for a project's contribution to be rendered less than cumulatively considerable with implementation of mitigation.

CEQA Guidelines, Section 15130(b), presents the following two possible approaches for considering past, present, and reasonably foreseeable future projects and indicates that either could be used:

- **A list-based approach.** A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.
- **A projections-based approach.** A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

For this PEIR, the projections-based approach (CEQA Guidelines, Section 15130[b][2]) was selected as the most appropriate methodology. This approach aligns with the nature and purpose of the HEU6, which is itself a long-term planning document, establishing the framework to accommodate regional housing needs over an 8-year period (2023–2031). Unlike site-specific development projects, a Housing Element does not propose discrete construction activities. Instead, it rather identifies the capacity for future housing development to meet state-mandated targets. Therefore, its impacts are both inherently cumulative and best analyzed in the context of long-range growth forecasts and regional planning documents.

The HEU6 addresses regional population and housing needs through land use planning analyzing broader regional development trends, and applying planning assumptions that are already incorporated into adopted local and regional plans, including General Plan policies, transportation plans, and water and infrastructure projections. As previously discussed, the HEU6 and sites inventory include 1,117 pending housing units on six pipeline sites, development of which would contribute toward the County's ability to meet the RHNA. These pending projects (i.e., pipeline sites) identified in the HEU6 are shown for informational purposes on HEU6 Figure 2-2 and listed in HEU6 Table 7-8. Because these pipeline sites are pending approvals independent of the HEU6, they are treated as separate, cumulative development projects. Similarly, the HEU6 identifies capacity for 346 ADUs that could also be developed independent of the HEU6 in areas zoned for single-family or multi-family residential use. As such, ADUs are treated as separate, cumulative development projects rather than considered in this PEIR's buildout analyses. Therefore, given that

pipeline sites and ADUs are credited toward the County's RHNA, they are both included and considered in the PEIR's projections-based cumulative impact analysis.

Because of the countywide nature of the HEU6, the cumulative analysis includes RHNA targets for all 12 cities within Monterey County, as well as the other two counties (Santa Cruz and San Benito counties) in the Association of Monterey Bay Area Governments (AMBAG) region (Table 4-1, RHNA for the AMBAG Region [June 30, 2023–December 15, 2031]).

**Table 4-1. RHNA for the AMBAG Region (June 30, 2023–December 15, 2031)**

| | Income Category Totals | | | | RHNA |
|---|---|---|---|---|---|
| Region | Very Low | Low | Moderate | Above Moderate | Total |
| **Monterey County** | | | | | |
| Carmel-By-The-Sea | 113 | 74 | 44 | 118 | 349 |
| Del Rey Oaks | 60 | 38 | 24 | 62 | 184 |
| Gonzales | 173 | 115 | 321 | 657 | 1,266 |
| Greenfield | 101 | 66 | 184 | 379 | 730 |
| King City | 97 | 63 | 178 | 364 | 702 |
| Marina | 94 | 62 | 173 | 356 | 685 |
| Monterey | 1,177 | 769 | 462 | 1,246 | 3,654 |
| Pacific Grove | 362 | 237 | 142 | 384 | 1,125 |
| Salinas | 920 | 600 | 1,692 | 3,462 | 6,674 |
| Sand City | 59 | 39 | 49 | 113 | 260 |
| Seaside | 86 | 55 | 156 | 319 | 616 |
| Soledad | 100 | 65 | 183 | 376 | 724 |
| Unincorporated Monterey | 1,070 | 700 | 420 | 1,136 | 3,326 |
| **Santa Cruz County** | | | | | |
| Capitola | 430 | 282 | 169 | 455 | 1,336 |
| Santa Cruz | 859 | 562 | 709 | 1,606 | 3,736 |
| Scotts Valley | 392 | 257 | 154 | 417 | 1,220 |
| Watsonville | 283 | 186 | 521 | 1,063 | 2,053 |
| Unincorporated Santa Cruz | 1,492 | 976 | 586 | 1,580 | 4,634 |
| *Monterey/Santa Cruz Counties Total* | *7,868* | *5,146* | *6,167* | *14,093* | *33,274* |
| **San Benito County** | | | | | |
| Hollister | 846 | 678 | 826 | 1,813 | 4,163 |
| San Juan Bautista | 18 | 14 | 18 | 38 | 88 |
| Unincorporated San Benito | 246 | 198 | 103 | 207 | 754 |
| *San Benito County Total* | *1,110* | *890* | *947* | *2,058* | *5,005* |
| **AMBAG Region Grand Total** | **8,978** | **6,036** | **7,114** | **16,151** | **38,279** |

**Source:** AMBAG 2022.

**Notes:** The state mandate for distributing the RHNA is tied to the state designation of a Council of Governments (COG). Each COG is expected to distribute the RHNA to their member jurisdictions. AMBAG is the Metropolitan Planning Organization for the Counties of San Benito, Santa Cruz, and Monterey and has prepared a 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy for the tri-county region. However, it is the COG for only the Counties of Santa Cruz and Monterey. For this reason, the California Department of Housing and Community Development makes a separate determination for San Benito County and tasks the San Benito County COG with developing its own RHNA Plan. AMBAG does coordinate with San Benito County COG so that its RHNA Plan is consistent with the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy.

The geographic scope of cumulative analysis varies by resource area. Consequently, this scope is separately defined in each topical section (Sections 4.1 through 4.19). For example, air quality is evaluated in the North Central Coast Air Basin, GHG emissions are assessed in alignment with the state's GHG emissions targets, and biological resources, cultural and Tribal Cultural Resources, water supply, and utilities impacts are evaluated based on regional or local contexts, which vary based on both the nature and extent of the potential impact and the selected CEQA significance threshold. This tiered, resource-specific approach ensures that the cumulative impact analysis reflects the severity, scale, and likelihood of cumulative effects across all relevant, impacted environmental issues. The PEIR thereby provides a comprehensive and reasonable evaluation of the HEU6's cumulative contribution to environmental change, consistent with CEQA requirements.

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# 4.1 Aesthetics

This section evaluates the potential for impacts related to aesthetics resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

HEU6 includes a total of 56 opportunity sites:[1] Opportunity Sites 1 through 6, 8 through 56, and 64 totaling 4,434 housing units as a reasonable development capacity, and this section used this reasonable development assumption to be developed on each parcel to determine impacts on aesthetics.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.1.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address aesthetics.

### 4.1.1.1 Federal

Refer to the National Historic Preservation Act in Section 4.5, Cultural Resources.

### 4.1.1.2 State

#### Coastal Act

The California Coastal Act contains several policies intended to protect scenic coastal resources, public views, and visual access to the coastline. Section 30251 of the California Coastal Act

[1] Opportunity Site 53 is in the Marina. The project requires a Memorandum of Understanding between the County, the City of Marina, and the University of California to guide compliance with HEU6 and the rezone. The City of Marina and the University of California are not subject to the County's codes or requirements; therefore, the by-right housing ordinance would not apply unless, and until, the Memorandum of Understanding requires compliance with the by-right housing ordinance.

identifies the scenic and visual qualities of coastal areas as resources of public importance and requires that development be sited and designed to protect views to and along the ocean and scenic coastal areas, minimize alteration of natural landforms, and be visually compatible with the character of surrounding areas. In addition, Sections 30210, 30211, and 30212 establish policies to maximize public access to and along the coast, prohibit development that would interfere with the public's right of access to the sea, and require new development to provide public access from the nearest public roadway to the shoreline unless specific exceptions apply. Collectively, these provisions seek to preserve the public's ability to experience coastal scenic resources, protect important coastal viewsheds, and ensure that new development in the coastal zone is designed to avoid substantial degradation of visual character and public coastal access opportunities.

### Senate Bill 743/California Public Resources Code, Section 21099

Senate Bill (SB) 743, codified in California Public Resources Code, Section 21099 et seq., eliminates aesthetic impacts as significant environmental effects for certain qualifying residential infill projects in Transit Priority Areas. None of the opportunity sites meet the statutory criteria for Transit Priority Areas or infill employment centers. Therefore, the provisions of SB 743 regarding aesthetics do not apply to the project and are not discussed further.

### California Scenic Highway Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program was created in 1963 with the goal of protecting the aesthetic significance of the state's scenic highways, as provided in the California Streets and Highways Code, Section 260 et seq. Accordingly, a highway may be designated as "scenic" based on certain criteria, including how much of the natural landscape can be seen by travelers, the landscape's scenic quality, and the extent to which development intrudes on the traveler's enjoyment of the view. The California Scenic Highway Program's Scenic Highway System List identifies scenic highways that are either eligible for designation or have already been designated as such. The California Scenic Highway Program also includes provisions for the Corridor Protection Program, which includes ordinances and planning policies required by jurisdictions to maintain lands visible from the designated scenic highways (Caltrans 2026).

### California Building Code

The California Building Code (CBC), Part 2 of Title 24 in the California Code of Regulations, is based on the International Building Code and combines three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in the International Building Code.
- Building standards that have been adopted from the International Building Code to meet California conditions.
- Building standards, authorized by the California Legislature, constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

The CBC includes standards for outdoor lighting that are intended to improve energy efficiency and to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls.

The CBC Title 24, Part 6 establishes the lighting zone system that classifies outdoor environments according to their ambient lighting needs and sensitivity to light pollution. Under this, Lighting Zones (LZ0 through LZ4) are established to ensure outdoor lighting is designed appropriately for the surrounding environment, balancing safety, visibility, and protection of night skies. Default Lighting Zone Assignments (per Title 24, Part 6) are as follows:

- **LZ0 – Very Low.** Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.
- **LZ1 – Low.** Rural areas, as defined by the 2020 U.S. Census. These areas include: single or dual family residential areas, parks, and agricultural zone districts, developed portion of government designated parks, recreation areas, and wildlife preserves.
  **LZ2 – Moderate.** Urban areas, as defined by the 2020 U.S. Census. The following building types may occur here: multifamily housing, mixed use residential neighborhoods, religious facilities, schools, and light commercial business districts or industrial zoning districts.
- **LZ3 – Moderately High.** Urban areas, as defined by the 2020 U.S. Census. The following building types may occur here: high intensity commercial corridors, entertainment centers, and heavy industrial or manufacturing zone districts.
- **LZ4 – High.** None.

## Mills Act

The Mills Act is a state law enacted in 1972 that encourages the preservation and maintenance of qualified historical structures. The Mills Act permits cities to enter into agreements with owners of qualified historical structures to preserve and maintain their properties, in exchange for the County Assessor assessing their property at a lower rate by using a formula established by the State of California.

### 4.1.1.3 Local

## 2010 General Plan (Inland)

### *Circulation Element*

Goal C-5 and Policies C-5.3 through C-5.6 support the County's efforts to maintain and enhance a system of scenic roads and highways through areas of scenic beauty without imposing undue restrictions on private property or constructing the normal flow of traffic. In particular, Policies C-5.3 and C-5.4 support land use controls and development standards to ensure that development and land use in the scenic highway corridors are compatible with the surrounding area.

### *Conservation and Open Space Element*

Goal OS-1 and Policies OS-1.1 through OS-1.12 help to retain the character and natural beauty of Monterey County by preserving, conserving, and maintaining unique physical features, natural resources, and agricultural operations. Specifically, Policies OS-1.3 through OS-1.6 place restrictions on ridgeline development. Policy OS-1.8 encourages clustering development in rural and agricultural areas to maximize access to infrastructure, protect prime agricultural land, and reduce impacts to designated visually sensitive and critical habitat areas. Additionally, it is the general policy of the County to require dedication of a scenic easement on a slope exceeding 25 percent (Policy OS-3.5). Policy OS-3.5 also requires development on slopes in excess of 25 percent to be allowed pursuant to a discretionary permit if findings are made that there is no feasible alternative and/or the proposed development better achieves the resource protection objectives of the Monterey County General Plan (2010 General Plan) and accompanying areas plans and master plans.

### *Land Use Element*

Policies LU-1.1 through LU-1.9 include policies related to promoting appropriate and orderly growth and development while protecting desirable existing land uses. LU-1.1 and LU-1.2 require managing growth related to type, location, timing, and intensity so that premature and scattered development doesn't occur. Policies LU-1.3 through LU-1.6 promote balanced growth by ensuring adequate land is designated for a range of land uses, directing growth to areas with adequate infrastructure and public services, promoting compatibility between adjacent land uses, and requiring development review standards for project siting, design, and landscaping. Policy LU-1.7 encourages clustering residential development on the most suitable portions of a site where infrastructure is available to preserve open space and environmental resources. Policy LU-1.8 encourages conservation easements, Transfer of Development Rights, and similar tools to reduce development potential in rural and agricultural areas while directing growth to appropriate locations. Policy LU-1.9 prioritizes infill development in existing developed areas and urban service areas while requiring compatibility with surrounding development.

Policy LU-1.13 requires that all exterior lighting be unobtrusive and constructed or located so that only the intended area is illuminated, long-range visibility of the lighting source is reduced, and off-site glare is fully controlled. Criteria to guide the review and approval of exterior lighting shall be developed by the County in the form of enforceable Design Guidelines, which shall include but not be limited to guidelines for the direction of light, such as shields, where lighting is allowed.

Policy LU-2.2 requires residential development to be limited in areas that are unsuited for more intensive development due to various physical characteristics such as hazards, the need to protect natural resources, or the lack of public services and facilities.

#### *Agriculture Element*

Policies AG-1.1 through AG-1.12 promote the long-term protection, conservation, and enhancement of productive and potentially productive agricultural land. In particular, Policy AG-1.2 requires agricultural buffers as partial mitigation for new non-agricultural development adjacent to farmland designated as Prime, of Statewide Importance, Unique, or of Local Importance.

### Area and Master Plans

#### *Carmel Valley Master Plan*

Policies CV-1.8, CV-1.9, and CV-1.20 (Land Use policies) and CV-3.1 through CV-3.4 and CV-3.8 through CV-3.12 (Conservation/Open Space policies) of the Carmel Valley Master Plan pertain to protecting visual resources. Specifically, Policies CV-1.8 and CV-1.9 support clustering development to protect natural resources. Policy CV-1.20 guides development within Design Control ("D") and Site Plan Review ("S") overlay district designations. Policy CV-2.9 (Circulation policies) encourages no roads to cross slopes steeper than 30 percent unless factors of erosion and visible scarring can be mitigated.

Policy CV-3.1 requires a minimum setback of 100 feet for properties abutting Carmel Valley Road. Policies CV-3.2 and CV-3.3 encourage improvements to public vistas and views of hillsides, natural landforms, and the river, through site design, avoidance of impacts to natural resources, and botanically appropriate landscaping. Policy CV-3.4 requires alteration of hillsides and natural landforms to be minimized through sensitive siting and design and maximum feasible restoration, including botanically appropriate landscaping, and requires disturbed areas to be vegetation in steep slopes. Policies CV-3.8 through CV-3.12 encourage the protection and preservation of existing native vegetation and diversity of habitats, including landscaping, erosion control measures, and tree removal permits. Policy CV-3.18 requires new aboveground transmission facilities to incorporate specific Design Guidelines, such as, but not limited to, following the least visible route, crossing ridgelines at the most visually unobtrusive locations, following natural terrain, creating simple unobtrusive appearance, minimizing the bulk, using the minimum number

of elements permitted by good engineering practice, and incorporating colors and materials compatible with local surroundings.

### *Carmel Valley Village Development Criteria*

The Carmel Valley Village Development Criteria provides more specific directions that implement and support the Carmel Valley Master Plan. All development in the Village Area requires review for discretionary approvals or other permits prior to actual construction, remodel, or land use intensification. The design criteria provide standards for grading and siting, Carmel Valley Road setbacks, architecture and exterior appearance, scale, materials and colors, architectural style, vegetation and landscaping, fences, paving and parking areas, outside storage of materials and equipment, lighting, signing, and circulation/parking/traffic.

### *Greater Monterey Peninsula Area Plan*

Land Use Policy GMP-1.1 requires the County to overlay properties north and south of Highway 68 and west of Laureles Grade with a Visually Sensitive District (VS) and/or other appropriate zoning designation to regulate the location, height, and design of structures in this unique scenic corridor. Policy GMP-1.4 requires development proposals to include compatible open space uses located between other developed areas to maintain a rural atmosphere and to protect scenic resources. Land Use Policy GMP-1.5 states that open space low intensity educational, and recreational uses shall be considered to be appropriate and compatible land uses in environmentally sensitive areas and areas of high visual sensitivity.

Conservation/Open Space Policies GMP-3.1 through GMP-3.6 identified in the Greater Monterey Peninsula Area Plan aim to minimize impacts to visual resources. Policy GMP-3.1 requires the County to encourage creative public and private efforts to restore the scenic beauty of visually impacted common public viewing areas. Monterey County Code (County Code), Section 21.06.195, defines “Common public viewing area” as a public area such as a public street, road, designated vista point, or public park from which the general public ordinarily views the surrounding viewshed. Policy GMP-3.2 requires development on canyon edges and hilltops to be designed to minimize the visual impact of the development. Policy GMP-3.3 includes development standards for "sensitive" and "highly sensitive" areas on the Greater Monterey Peninsula Scenic Highway Corridors and Visual Sensitivity Map that are generally visible from designated scenic highways. Policy GMP-3.4 through GMP-3.6 encourage the use of plant materials to screen or soften the visual impact of new development, discourage the removal of healthy, native trees, and require a 100-foot setback from all wetlands. Safety Policy GMP-4.1 requires redwood, pine, oak forest, and chaparral habitat on land exceeding a 25 percent slope to remain undisturbed due to potential erosion impacts and loss of visual amenities.

### *Fort Ord Master Plan*

Objective C for Biological Resources and applicable policies of the Fort Ord Master Plan are intended to avoid or minimize disturbance to natural land features and habitats through sensitive planning, siting, and design as new development is proposed in undeveloped lands. Biological Resources Policy C-1 and Program C-1.1 encourage grading for projects to be designed to complement surrounding topography and to minimize habitat disturbance through the use of landform grading techniques. Biological Resources Policy C-2 supports the preservation and enhancement of native oak woodland elements in the natural and built environments, through clustering of development (Program C-2.1), preservation (Program C-2.2), the use of oaks and other native plants for project landscaping (Program C-2.3), standards for plantings under oak trees (Program C-2.4), and avoidance of paving within the drip line of preserved oak trees (Program C-2.5). Biological Resources Policy C-3 encourages the minimization and control of outdoor lighting to maintain habitat quality for wildlife in undeveloped natural lands. Specifically, in accordance with Program C-3.1, the County shall review lighting and landscape plans for all development applications to ensure consistency with Policy C-3. Recreation and Open Space Element Objective B is to protect scenic views and preserve and enhance visual quality

### *Central Salinas Valley Area Plan*

Policy CSV-3.1 states that landscaping or new development may be permitted in areas designated as “sensitive” or “highly sensitive” on the Scenic Highway Corridors and Visual Sensitivity Map if the development is located and designed in such a manner that public views are not disrupted.

### *Greater Salinas Area Plan*

Policy GS-2.3 states that the Highway 101 bypass shall be designated a scenic highway designed to incorporate sound deflection berms with appropriate landscaping consistent with its "scenic highway" designation. Policy GS-3.1 encourages all vegetation on land exceeding 25 percent slope, particularly chaparral and broad leaf evergreen to remain undisturbed to minimize erosion and retain important visual amenities. Policy GS-3.2 states that native plant materials should be used to integrate the human-made environment with the natural environment and to screen or soften the visual impact of new development.

### *North County Area Plan (Inland)*

Policy NC-3.1 permits landscaping or new development in areas designated as “sensitive” or “highly sensitive” on the Scenic Highway Corridors and Visual Sensitivity Map if the development is located and designed in such a manner that public views are not disrupted; Policy NC-3.3 gives high priority to conservation of North County’s native vegetation to promote the area’s natural scenic qualities. Policy NC-3.4 requires the County to develop an ordinance for removal of healthy, native oak and madrone trees. NC-3.9 prohibits development on slopes with highly erodible soils, in excess of 25 percent, and that drains into the watershed of the Elkhorn and Moro Cojo Sloughs.

### *Toro Area Plan*

Policy T-1.5 requires subdivisions to be designed so that new building sites are outside of critical viewshed. Policy T-3.2 requires land use, architectural, and landscaping controls in visually sensitive areas and scenic entrances, which includes the River Road and Highway 68 intersection.[2] Policy T-3.3 requires a 100-foot setback with dedicated open space easements on lots adjacent to County and state-designated scenic routes; T-3.5 requires exterior/outdoor lighting to be located, designed, and enforced to minimize spill lighting and preserve the quality of darkness. T-3.6 requires large acreages in higher elevations and on steeper slopes to be preserved and enhanced for grazing, where grazing is found to be a viable option. Policy T-3.7 requires development of a tree removal ordinance to place limitations on removal of healthy, native oak trees.

## Community Plans

### *Castroville Community Plan*

Goal 1 and Policies 1.1 through 1.6 support maintenance of the community's existing small town, agricultural character while enhancing its sense of place and safety through appropriate design programs. Specifically, Policies 1.2 and 1.5 require that new development and redevelopment proposals and projects be consistent with the Community Plan Design Standards and Design Guidelines. Goal 2 and Policies 2.1 through 2.3 are intended to ensure that new development and redevelopment are compatible with existing development and enhance the character of the community. Goal 5 and Policy 5.1 of the Castroville Community Plan call for new development to coordinate with local and regional organizations to enhance the community's important natural and human-made resources, particularly the sloughs within the vicinity of Castroville.

The Castroville Community Plan Design Guidelines specifically address site design, architectural design, lighting, landscaping, parking, and signage. In addition, if a project affects a designated Historical Building or Site, the County's Historic Resources Review Board will review the project for compliance with applicable regulations and requirements under their purview. The Design Guidelines include a Historic Character section, which provides guidelines to assist with preservation of all buildings representing the community's historic past and to ensure that additions to these structures maintain this historic integrity.

## 1982 General Plan (Coastal)

Policies 26.1.6 through 26.1.12 and 26.1.17 support preservation of the County's scenic qualities and rural character, including requiring special permits for ridgeline development (Policy 26.1.9). Goal 40 and objectives and policies thereunder are intended to maintain and enhance a system of

[2] Opportunity Site 24 is at the intersection of Highway 68 and Reservation Road, where Reservation Road becomes River Road east of Highway 68. Refer to Figure 16, Scenic Highway Corridors & Visual Sensitivity, Toro Area, of the Toro Area Plan (https://www.countyofmonterey.gov/home/showpublisheddocument/45902/639118579872430000).

scenic roads and highways through areas of scenic beauty, through encouragement of special treatment and design provisions along these corridors.

Policy 7.2.1 encourages developers to preserve the integrity of existing terrain and natural vegetation in visually sensitive areas such as hillsides and ridges. Policy 56.2.2 requires undergrounding of existing utility lines whenever feasible.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan*

Key Policy 2.2.1, General Policies 2.2.2, and Specific Policies 2.2.3 protect beach, dune, estuary, and wetland areas as well as views of these areas from impacts of development. Specifically, General Policies 2.2.2 encourage the siting of structures and other development where existing topography and vegetation provide natural screening and to minimize obstruction of views, tree removal, and grading. Policy 2.2.2.3 encourages scenic or conservation easement during the subdivision process to the fullest extent possible for wooded ridges, hills, and areas of 30 percent slope or more. Specific Policies 2.2.3 provide policies for utilities, signage, roads, and structures to avoid impacts to public views. Policy 4.3.6.D.1 requires land divisions for residential purposes to be approved at a density determined by evaluation of site and cumulative impact criteria that include geologic, flood, and fire hazard, slope, vegetation, environmentally sensitive habitat, water quality, water availability, erosion, septic tank suitability, adjacent land use compatibility, public service and facility, and where appropriate, coastal access and visual resource opportunities and constraints.

Specific visual access[3] policy, Policy 6.4.G, encourages future development within the public viewshed [4]to be sited and designed to preserve visual access to the shoreline from major public viewpoints and viewing corridors while remaining compatible with the existing natural and built environment. The policy also requires the retention and enhancement of visual access through scenic viewpoints and roadway or recreational improvements and limits the installation of new streetlights unless specifically approved through the development review process.

### *Carmel Area Land Use Plan*

Resource Management Policies 2.2.2, 2.2.3, and 2.2.4 aim to minimize views of development from the public viewshed. Policy 2.2.3 calls for siting development on the portion of a parcel least visible from public viewpoints and corridors and using appropriate materials and landscaping to ensure that structures are subordinate to and blended into the environment. Policy 2.2.4 supports maintaining the existing forested corridor along Highway 1 and continued agricultural uses along the Highway 1 corridor. It also includes siting and design control measures for development and standards for power lines and public highway facilities (e.g., signs, guardrails, and restrooms).

[3] Visual access is defined as access for scenic viewing of the shoreline or ocean from either a vista point, public road, or trail.
[4] Public viewshed is defined as the composite area visible from major public use areas and scenic corridors.

Policy 2.5.2 states that the primary use of forested land in the Carmel area shall be for recreation, aesthetic enjoyment, educational, scientific, watershed, and habitat protection activities. Limited selective logging activities may be allowed provided that all natural resource protection policies of this plan and requirements of the State Forest Practice Act are met. The protection and conservation of old growth redwood is a primary goal of this plan.

Public Access Policy 5.3.2.4 indicates that existing visual access from scenic viewing corridors (e.g., Highway 1, Scenic Road, Spindrift Road, Yankee Point Drive) and from major public viewpoints, and future opportunities for visual access from the frontal ridges east of Highway 1 should be permanently protected as an important component of shoreline access and public recreational use.

Public Access, Public Safety Policy 5.3.3.2.b states that in hazardous areas where safe access to the shoreline is not feasible, visual access should be emphasized as an appropriate response to the needs of the public.

Visual Access Policy 5.3.3.4.b states that visual access should, where appropriate, be enhanced through the development of scenic overlooks in conjunction with improvement of existing roads, development of new roads, or development of a recreation trails system on the frontal ridges and slopes east of Highway 1.

## Monterey County Code

### *Title 16 – Environment*

#### Chapter 16.08 – Grading.

This chapter sets forth rules and regulations to control all grading, including excavations, earthwork, road construction, fills and embankments, and establishes the administration procedure for issuance of permits; and provides for approval of plans and inspections of grading construction.

#### Chapter 16.60 – Preservation of Oak and Other Protected Trees.

This chapter provides tree protection regulations throughout the unincorporated area of the County of Monterey outside the coastal zone. It requires a permit for removal of qualifying trees in various plan areas. Qualifying trees and regulations vary by planning area. To grant the permit for tree removal, the Appropriate Authority is required to make appropriate findings based on substantial evidence. The findings include: 1) the tree removal is the minimum required under the circumstances; 2) the removal will not involve a risk of adverse environmental impacts related to soil erosion, water quality, ecological impacts, noise pollution, air movement, and wildlife habitat; and 3) the tree is diseased, injured, or creates unsafe conditions. In granting any permit as provided herein, the Appropriate Authority may attach reasonable conditions to mitigate environmental

impacts and ensure compliance with the provisions of this chapter, including but not limited to replacement of trees removed.

#### Chapter 16.63 – Standards for Landscaping

This chapter provides a path for the design, installation, management, and maintenance of landscaping and irrigation in all of UMC. It provides submittal requirements of the landscape package for minor and major landscapes.

### *Title 18 – Building and Construction*

#### Chapter 18.28 – Mills Act Program

State law provides that the legislative body of a county may contract with the owner of any qualified historical property in a manner which the legislative body deems reasonable to carry out the purposes of the Mills Act. The Mills Act enables the Board of Supervisors of the County of Monterey, in its discretion, to enter into historic property contracts with the owners of certain selected qualified historic properties in UMC. The historic property contract allows the owner of a qualified historical property to obtain preferential property tax assessment in exchange for restrictions on the property to help preserve, restore, and maintain the historic property.

### *Title 19 – Subdivision*

**Section 19.10.055, Grading.** This section requires maximized retention of natural land forms such as rolling hills, ridgetops, areas of extensive vegetation, and water courses. It prohibits large flat planes or sharp angles or intersection with the natural terrain. Slopes are required to be rounded to blend with existing terrain. Extensive terracing is prohibited.

### *Title 21 – Zoning (Inland)*

#### Chapter 21.10 – Regulations for High Density Residential Zoning Districts of "HDR" Districts

This chapter provides provisions to accommodate high density residential uses in those areas of the UMC there adequate services and facilities exist or may be developed to support such development. It is intended in this chapter to require adequate on-site facilities and amenities to assure proper, usable, and livable development while allowing sufficient design flexibility to provide such development. This

#### Chapter 21.44 – Regulations for Design Control Zoning Districts or "D" Districts

The County has the "Design Control (D)" zoning district to provide for the regulation of the location, size, configuration, materials, and colors of structures and fences, except agricultural fences, in those areas of the UMC where the design review of structures is appropriate to assure protection of the public viewshed, neighborhood character, and to assure the visual integrity of certain developments without imposing undue restrictions on private property. This chapter

provides the specific design approval process for properties in the "D" zoning district. Section 21.44.030 requires a Design Approval Application to be submitted and approved prior to the issuance of building permits for the construction of any structures in the "D" zoning district, and they require the Design Approval Application to include the following for the Appropriate Authority's review and action:

- Drawings showing front, side, and rear elevations, existing and proposed grades of proposed structures.
- Color samples indicating the proposed color scheme for the structures.
- Plot plans or drawings showing, at scale and in reasonable detail, proposed structure location, topography, existing vegetation, proposed parking layout, proposed landscaping, and north arrow.
- Preaddressed stamped envelopes for all people to receive public notice.

Section 21.44.040 lists the Appropriate Authority to consider and decide a Design Approval Application, and it requires that the Planning Commission be the Appropriate Authority for those structures that have the greatest potential to impact public views, such as structures along scenic highway or road corridors, in areas designated as critical viewshed, or which may have a substantial adverse visual impact from common public viewing areas. Section 21.44.050 establishes the public noticing requirements, including the time and place at which an application will be considered and decided.

#### Chapter 21.45 – Regulations for Site Plan Review Zoning Districts or "S" Districts

This chapter of the zoning code provides district regulations for review of development in those areas of the UMC where development, by reason of its location has the potential to adversely affect or be adversely affected by natural resources or site constraints. Development in this zoning requires a site plan approval application to be submitted and approved by the Appropriate Authority prior to the issuance of permits for the construction of any development. Similar to the Design Control ("D") zoning district, the application requires plot plans or drawings showing, at scale, and in reasonable detail, proposed structure location, topography, existing vegetation, proposed landscaping, proposed parking layout, proposed grading, any identified environmentally sensitive habitats, any identified hazards, identified archaeological resources and historical sites, and north arrow. It also requires new development to require an Administrative Permit approval by the Appropriate Authority.

#### Chapter 21.46 – Regulations for Visual Sensitivity Zoning Districts or "VS" Districts

This chapter of the zoning code provides district regulations for the review of development in those areas of the UMC (inland) in which such development could potentially create adverse visual impacts when viewed from a common public viewing area. It requires that no construction of structures, additions, grading, significant vegetation removal, or deposit or removal of material

causing the change, alteration, or modification of the landscape or existing development are to be permitted without the approval of the Appropriate Authority. All development in the VS zoning district shall require a Use Permit or an Administrative Permit, approved by the Appointing Authority depending on the circumstances of the project. It also provides development standards (Section 21.46.060, Standards) intended to minimize the project's visibility. This chapter requires development within VS district to comply with the County's Staking and/or Flagging Criteria.

**Section 21.63.020, Design Guidelines for Exterior Lighting.** This section requires any new development that includes exterior lighting to be consistent with the Design Guidelines for Exterior Lighting. The purpose of the Design Guidelines for Exterior Lighting is to implement Policy LU 1.13 of the General Plan that requires exterior lighting to be unobtrusive, reduce off-site glare, and only light an intended area. The Design Guidelines for Exterior Lighting was adopted by the Board of Supervisors on January 26, 2016. It establishes criteria for the location and direction of fixtures, number of fixtures, and design of fixtures. This document provides information on energy efficiency and best management practices for exterior lighting and visual aids for various types of acceptable light fixtures. The Guideline is applicable to the non-coastal areas of UMC and enforceable by the Director of Planning (Chief of Planning) and applies to all new development that includes exterior lighting, with exceptions as outlined in the guidelines. The Design Guidelines for Exterior Lighting provide the following definitions:

- Direct Illumination – the direct view of a light source
- Fully shielded – shielding that does not allow the light source to protrude outside the shield
- Glare – Direct Illumination of intensity great enough to reduce a viewer's ability to see
- Light fixture – a complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, position and protect the lamps, and connect to power supply
- Light source – source of artificial light in the form of a bulb or lamp
- Light trespass – direct illumination that can be seen from adjacent property
- Light pollution – artificial light which causes a detrimental effect on the environment, astronomical research or enjoyment of the night sky or causes undesirable glare or unnecessary illumination of adjacent property
- Shielding – a barrier around a fixture that helps to conceal the light source and direct light to an intended area
- Temporary lighting – lighting used for activities of a limited duration, e.g., emergency activities, construction, agriculture, etc.
- Translucent – allowing the passage of diffused light
- Transparent – allowing the direct passage of light

**Chapter 21.64 – Special Regulations**

**Section 21.64.230, Regulations for Development on Slopes in Excess of Thirty Percent.** This section establish**es** regulations, procedures, and standards to consider development on slopes in excess of 30 percent. All development on slopes of 30 percent or more requires a Use Permit, except limited activities allowed under Section 21.64.230.C.2 and 1.64.230.C.3, which allow limited exploratory soil and geologic testing, limited disturbance on human-made slopes, and interior modifications with an Administrative Permit.

**Section 21.64.260, Preservation of Oak and Other Protected Trees.** This section establishes regulations for the protection and preservation of oak and other specific types of trees as required in the Monterey County General Plan, area plans, and master plans. This section is also intended to provide the procedures under which the proposed removal of such trees may be considered or exempt.

**Chapter 21.66 – Development Standards**

**Section 21.66.010, Standards for Ridgeline Development.** This section provides standards for ridgeline[5] development, requiring a Use Permit. A Use Permit is approved only if the ridgeline development will not create a substantially adverse visual impact when viewed from a common public viewing area,[6] based on substantial evidence.

**Section 21.66.050, Standards for Environmentally Sensitive Habitats.** This section provides provisions for areas known by available resource information, review, or other research to contain environmentally sensitive habitats.

### *Title 20 – Coastal Zoning (Coastal)*

**Chapter 20.10 – Regulations for High Density Residential Zoning Districts or "HDR (CZ)" District.**

This chapter provides provisions to accommodate high density residential uses in those areas of the UMC where adequate services and facilities exist or may be developed to support such development. It is intended within this chapter to require adequate on-site facilities and amenities to assure proper, usable, and livable development while allowing sufficient design flexibility to provide such development. This chapter provides principal uses allowed in the zone, requiring that a Coastal Administrative Permit be required in each case unless exempt under Section 20.70.120 (Coastal Development Permits). It also provides site development standards (Section 20.10.060).

**Section 20.12.060, Site Development Standards.** This section provides site development requirements for Medium Density Residential (coastal zone) (MDR (CZ)) zoning district,

[5] "Ridgeline development" means development on the crest of a hill which has the potential to create a silhouette or other substantially adverse impact when viewed from a common public viewing area (County Code, Sections 20.06.950 and 21.06.950).

[6] "Common public viewing area" means a public area such as a public street, road, designated vista point, or public park from which the general public ordinarily views the surrounding viewshed (County Code, Sections 21.06.195 and 20.06.197)

including minimum building site, development density, height, and setback, parking regulations, landscaping requirements, lighting plan requirements, and sign regulations. Lighting plan requirements in this zoning district indicate that all exterior lighting for developments of more than two residential units on a lot to be unobtrusive, harmonious with the local area and constructed or located so that only the area intended is illuminated and off-site glare is fully controlled. The location, type and wattage of the exterior lighting must be approved by the Director of Planning and Building Inspection prior to the issuance of building permits or the establishment of the use.

#### Chapter 20.44 – Regulations for Design Control Zoning Districts or "D" Districts

Chapter 20.44 of the County Code provides the specific design approval process for properties in the Design Control (D) district in the coastal zone. These are similar to those described for the inland D District per Chapter 21.44 of the County Code. Opportunity Sites 16 and 43 are in the Carmel Area Land Use Plan.

**Section 20.64.230, Development on Slopes in Excess of 30%.** This section establishes regulations, procedures and standards to consider development on slopes in excess of 30 percent (25 percent in North County). All development on slopes of 30 percent or more generally requires a Coastal Development Permit except as provided in Section 20.64.230(C)(2) and (3), which allows for limited exploratory soils and geologic testing, limited disturbance on human-made slopes, and internal remodeling with a Coastal Administrative Permit.

**Section 20.66.010, Standards for Ridgeline Development.** This section provides standards for ridgeline development in the coastal zone. Ridgeline development requires a Coastal Development Permit (CDP) in each case. A CDP is approved only if the ridgeline development, as condition by permit, will not create a substantially adverse visual impact when viewed from a common public viewing area, based on substantial evidence.

### North County Land Use Plan Area – Coastal Implementation Plan

**Section 20.144.030, Visual Resources Development Standards.** The intent of this section is to provide development standards that will protect the visual resources of North County. Development is prohibited to the fullest extent possible in beach, dune, estuary, and wetland areas. Only low intensity development that can be sited, screened, or designed to minimize visual impacts shall be allowed on scenic hills, slopes, and ridgelines. All projects on parcels that are or may be either wholly or partially within the public viewshed, as defined in Section 20.144.020.SSS; and all proposals for minor subdivisions, standard subdivisions, industrial uses, commercial uses, and residential projects are subject under the viewshed determination provisions. Additionally, subdivisions of parcels containing areas visible from a public viewing areas are required to minimize the development's visibility from the viewing areas by incorporating appropriate planning techniques such as, but not limited to: a) lot configuration to be screened by existing

topography and vegetation; b) providing building sites and access road locations that allow for natural screening by existing topography and vegetation minimized grading, minimized tree removal, and development on less than 25 percent slopes; and c) clustering of structures, with wooded hills and ridges placed in open space lots or scenic easement (Sections 20.144.030. B.1.a, b, and c). Development standards also require new utility and transmission lines to be placed underground (Sections 20.144.030.B.9).

#### *Coastal Implementation Plan – Regulations for Development In the Carmel Area Land Use Plan*

**Section 20.146.030, Visual Resources Development Standards.** The intent of this section is to provide development standards to protect the scenic resources of the Carmel area in perpetuity and to ensure that all future development within the viewshed will harmonize and be clearly subordinate to the natural scenic character of the area. Development standards include requiring a project planner to make an on-site investigation to determine whether the project is within the public viewshed by flagging and staking (Section 20.146.030.B); requirements for underground utilities except where overriding natural or physical constraints exists and a waiver of underground utilities is approved (Section 20.146.030.B); blending structures into the environment using appropriate materials that will achieve that effect, and modifying plans for siting, structural design, height, shape, color, texture, building materials, access and screening through the Coastal Development Permit process, and applying various siting and design control measures to ensure protection of the Carmel area's scenic resources (Section 20.146.030.C); and providing specific development standards for roads, along Highway 1, public highway facilities (e.g., signs, guardrails and restrooms), and antennas and utility lines (Section 20.146.030.D).

## 4.1.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to aesthetics.

### 4.1.2.1 Scenic Highways and Resources

Monterey County is on the Central Coast of California just south of the San Francisco Bay Area, about 45 miles from San José and about 106 miles from the City of San Francisco. UMC encompasses a diverse range of natural landscapes including its coastline, mountain ranges, river valleys, and agricultural landscape, which create regionally and statewide significant scenic qualities that shape the visual identity of the area.

As shown on Figures 4.1-1a through 4.1-1i, Scenic Highways and Routes, State Routes 1, 25, 68, 101, 156, and 183 are designated state scenic highways in Monterey County[7]. Additionally, there

[7] Also refer to County of Monterey website for 2010 General Plan's Scenic Highway Corridors & Visual Sensitivity figures for Central Salinas Valley (Figure 13), Greater Monterey Peninsula (Figure 14), North County (Inland) (Figure 15), and Toro Area (Figure 16). https://www.countyofmonterey.gov/government/departments-a-h/housing-community-development/planning-services/current-planning/general-info/2010-monterey-county-general-plan-adopted-october-26-2010

are existing and proposed County-designated scenic highways and routes. Table 4.1-1, Opportunity Sites Near Existing and Proposed Scenic Highways and Routes, lists opportunity sites that are adjacent to or in proximity (approximately 0.25 mile) to Caltrans-designated or existing and proposed County scenic highways and routes. There are a total of 30 opportunity sites that are adjacent to or near Caltrans-designated scenic highways and existing and proposed County scenic highways and routes. Five opportunity sites (Opportunity Sites 9, 16, 30, 44, and 52) are within 100 feet of Caltrans-designated scenic highways. These opportunity sites are spread across six area plans, master plans, and LCP land use plans.

**Table 4.1-1. Opportunity Sites Near Existing and Proposed Scenic Highways and Routes**

| Plan Area | Scenic Highways/Routes | Opportunity Sites |
|---|---|---|
| Carmel Area Land Use Plan | Highway 1* | 16** |
| Carmel Valley Master Plan | Highway 1*, Carmel Valley Road (Proposed) | 17, 18, 19, 20, 22, 35, 37, 54 |
| | Carmel Valley Rd (Proposed) | 23, 38, 55 |
| | Carmel Valley Rd (Proposed)/Robinson Canyon Road | 36, 56 |
| Central Salinas Valley Area Plan | State Route 198* | 33, 34 |
| Greater Monterey Peninsula Area Plan | Highway 68* | 46, 52** |
| | Highway 1*, Highway 68* | 40, 45 |
| North County Area Plan (Inland) | Highway 156* | 14, 15, 30**, 39, 41 |
| | Highway 101* | 8, 9**, 10, 44** |
| Toro Area Plan | Highway 68*, Reservation Road (Proposed) | 24 |

**Source:** County of Monterey 2026.

**Notes**: * Denotes California Department of Transportation designated scenic highways and routes.

** Denotes opportunity sites within 100 feet of state or County-designated scenic highways and routes.

The Carmel Area Land Use Plan area supports the rocky promontories, sandy beaches, and bluffs of the immediate shoreline, the open Palo Corona slopes, the Carmelite Monastery and forested slopes, the rural pasturelands south of San José Creek Beach, Point Lobos Ridge, and the ridgetop immediately south of Point Lobos Ridge and Gibson Creek. The scenic qualities of the Carmel area have long been attracting visitors from all over California and beyond as part of the Monterey coast. Development of the Carmel area has been limited by natural constraints and hazards such as, but not limited to rugged terrain and difficult access, and unstable slopes. The more accessible locations adjacent to Highway 1 have been the focus of residential and visitor-commercial development and use.

The Carmel Valley Master Plan area is a major northwest-southeast trending valley that is bounded by ridges of the California coastal range, and is scenic. In the planning area, elevations range from just above sea level on the valley floor near the ocean to over 2,000 feet at some of the peripheral ridgelines. Major views are seen primarily from the Carmel Valley Road and Laureles Grade corridors. Many homes have views of one side of the valley or the other, with the quality of view being determined principally by the interrelationship between natural landforms and vegetative masses.

The Central Salinas Valley Area Plan area encompasses extensive agricultural fields stretching across the valley floor. The Salinas River runs through the valley area with backdrops of the Sierra de Salinas and Santa Lucia Ranges forming the eastern and western walls of the valley. These mountains and hillsides are covered by a mixture of native oak savannas, sycamore river valleys, grasslands, and scrub chaparral.

Approximately 205 square miles in size, the Greater Monterey Peninsula Area Plan area is composed of the unincorporated areas surrounding the Cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, and Seaside, and is well known for its natural beauty of forests and coastline. The topography of the Greater Monterey Peninsula Planning Area varies greatly, from coastal outcroppings and level bottomland to steep slopes. The area is characterized by its abundant open space.

The North County Area Plan (Inland) area is a distinctive region containing scenic valleys and ridges, which are important agricultural lands. Castroville and Pajaro are part of the North County Planning Area (Inland) and have agriculture-based economies. These communities offer urban densities with a "small town" or “village” character. The rural areas of Prunedale, Aromas, and Las Lomas provide a community focus for residents in nearby secluded valleys and canyons. Much of the valley floor is not designated as a formal scenic resource, while the surrounding ridgelines and the Highway 101 corridor are recognized as important scenic corridors. Views from Highway 101, a major north–south travel corridor, include expansive agricultural landscapes with mountain backdrops.

North County Land Use Plan (coastal) area has various valuable natural resources such as Elkhorn Slough, the most significant estuaries of the area, and other valuable wetlands such as Bennett Slough, Struve Pond, Old Salinas River Channel, Salinas Lagoon; the broad beaches and dunes that line the coast of Monterey Bay; and the aera east of Elkhorn Slough has oak and chaparral-covered hills and numerous small canyons and valleys.

Toro Area Plan and Fort Ord Master Plan areas are inland communities that include a mixture of rangeland, coastal scrub, and remnants of military lands that are being repurposed for new development. The Toro Area provides views of grass-covered hills and oak-dotted ridges along Highway 68, a state scenic highway, which connects the Salinas Valley to the Monterey Peninsula.

#### 4.1.2.2 Visual Sensitivity

The County designates visual sensitivity areas in UMC as shown on Figure 4.1-2, Visual Sensitivity Areas, and Figure 4.1-2a through 4.1-2d, Visual Sensitivity Areas.[8] Visual sensitivity areas in UMC are classified as sensitive, highly sensitive, and critical viewshed. As summarized

[8] The figures depict visual sensitivity mapping only for the opportunity sites. Due to limitations of the County's online GIS mapping database, it does not display all areas in the UMC that have visual sensitivity designations. Refer to the County website https://www.countyofmonterey.gov/government/departments-a-h/housing-community-development/planning-services/library-current-major-projects/general-plan-land-use-plans for the complete visual sensitivity mapping applicable to area plans, master plans, and Local Coastal Program (LCP) land use plans.

in Table 4.1-2, Summary of Opportunity Sites with Visual Sensitivity, 19 opportunity sites are identified as within the visual sensitivity area, and the vast majority of the sites are in the Carmel Valley Master Plan (14 opportunity sites), two opportunity sites are in the Carmel Area Land Use Plan, and three are in the Greater Monterey Peninsula Area Plan. This table also shows opportunity sites that are near scenic highways or routes. Not all visual sensitive areas have the Design Control (D) or Site Plan Review (S) zoning designation, and not all opportunity sites that are near scenic routes have identified visual sensitivity areas or have D or S zoning overlay. There are 18 opportunity sites (Opportunity Sites 16 through 23, 35 through 38, 40, 45, 52, 54 through 56) that have the current D and S zoning overlay, assigned with sensitive or highly sensitive visual sensitivity, and are also near a scenic route.

**Table 4.1-2. Summary of Opportunity Sites with Visual Sensitivity**

| Site No. | Acreage in Sensitivity Area/Total Site | Planning Area | Current Zoning | Vegetation Communities Land Use Cover Types | "D" or "S" Zoning District? | Near Scenic Route? | Visual Sensitivity |
|---|---|---|---|---|---|---|---|
| 8 | None | NCAP (Inland) | LDR/2.5 | Mixed Conifer Forest, Oak Woodland, Annual Grassland | No | Yes | N/A |
| 9 | None | NCAP (Inland) | PQP | Oak Woodland, Annual Grassland, Urban/Developed Land | No | Yes | N/A |
| 10 | None | NCAP (Inland) | LC | Oak Woodland, Annual Grassland, Urban/Developed Land | No | Yes | N/A |
| 14 | None | NCAP (Inland) | CCP (MU-C) | Annual Grassland, Agricultural Land, Urban/Developed Land, Fresh Water | No | Yes | N/A |
| 15 | None | NCAP (Inland) | CCP (MU-C) | Annual Grassland, Agricultural Land, Urban/Developed Land, Fresh Water | No | Yes | N/A |
| 16 | 3.19/3.23 | CALUP | MDR/2-D (CZ) | Mixed Conifer Forest, Urban/Developed Land | Yes | Yes | Sensitive |
| 17 | 3.51/3.51 | CVMP | LC-D-S-RAZ | Urban/Developed Land | Yes | Yes | Sensitive |
| 18 | 2.67/2.67 | CVMP | LDR/1-D-S-RAZ | Annual Grassland, Urban/Developed Land | Yes | Yes | Sensitive |
| 19 | 2.63/2.63 | CVMP | LDR/1-D-S-RAZ | Annual Grassland, Agricultural Land, Urban/Developed Land | Yes | Yes | Sensitive |
| 20 | 5.33/5.33 | CVMP | LDR/1-D-S-RAZ | Oak Woodland, Annual Grassland, Agricultural Land, Urban/Developed Land | Yes | Yes | Sensitive |

**Table 4.1-2. Summary of Opportunity Sites with Visual Sensitivity**

| Site No. | Acreage in Sensitivity Area/Total Site | Planning Area | Current Zoning | Vegetation Communities Land Use Cover Types | "D" or "S" Zoning District? | Near Scenic Route? | Visual Sensitivity |
|---|---|---|---|---|---|---|---|
| 21 | 2.82/2.82 | CVMP | LDR/1-D-S-RAZ | Oak Woodland, Annual Grassland, Agricultural Land | Yes | Yes | Sensitive |
| 22 | 6.25/6.25 | CVMP | LDR/1-D-S-RAZ | Mixed Conifer Forest, Oak Woodland, Annual Grassland, Chaparral, Agricultural Land, Urban/Developed Land | Yes | Yes | Sensitive |
| 23 | 0.48/0.48 | CVMP | LC-D-S | Urban/Developed Land | Yes | Yes | Sensitive |
| 24 | None | TAP | MU/15-D | Agricultural Land, Urban/Development Land | Yes | Yes | None |
| 30 | None | NCAP (Inland) | CCP (MU-C) | Urban/Developed Land | No | Yes | N/A |
| 31 | None | FOMP | PQP-D-S | Orak Woodland, Annual Grassland, Coastal Scrub, Urban Developed Land | Yes | No | N/A |
| 33 | None | CSVAP | LDR/1 | Urban/Developed Land | No | Yes | N/A |
| 34 | None | CSVAP | LDR/1 | Urban/Developed Land | No | Yes | N/A |
| 35 | 3.93/3.93 | CVMP | VO-B-6-D-S-RAZ | Urban/Developed Land | Yes | Yes | Sensitive |
| 36 | 1.22/1.22 | CVMP | HC-D-S-RAZ | Urban/Developed Land | Yes | Yes | Sensitive |
| 37 | 6.21/6.21 | CVMP | LDR/1-D-S-RAZ | Mixed Conifer Forest, Annual Grassland, Agricultural Land, Urban/Developed Land | Yes | Yes | Sensitive |
| 38 | 4.79/4.79 | CVMP | PQP-D-S-RAZ | Annual Grassland, Urban/Developed Land | Yes | Yes | Sensitive |
| 39 | None | NCAP (Inland) | LDR/1 | Urban/Developed Land[1] | No | Yes | N/A |
| 40 | 26.78/26.78 | GMPAP | RDR/5.1-UR-D-S | Mixed Conifer Forest, Oak Woodland | Yes | Yes | Highly Sensitive |
| 41 | 0.62/0.62 | NCAP (Inland) | CCP (MU-C) | Urban/Developed Land | No | Yes | N/A |
| 43 | 1.455171/1.57 | CALUP | MDR/2-D(CZ) | Mixed Conifer Forest[1] | Yes | No | Sensitive |
| 44 | None | NCAP (Inland) | LC | Annual Grassland, Urban/Developed Land, Coastal Scrub | No | Yes | N/A |
| 45 | 4.62/4.62 | GMPAP | RDR/5.1-UR-D-S | Mixed Conifer Forest, Urban/Developed Land | Yes | Yes | Highly Sensitive |

**Table 4.1-2. Summary of Opportunity Sites with Visual Sensitivity**

| Site No. | Acreage in Sensitivity Area/Total Site | Planning Area | Current Zoning | Vegetation Communities Land Use Cover Types | "D" or "S" Zoning District? | Near Scenic Route? | Visual Sensitivity |
|---|---|---|---|---|---|---|---|
| 46 | None | GMPAP | PQP-D-S | Mixed Conifer Forest, Oak Woodland, Annual Grassland, Coastal Scrub, Urban/Developed Land, | Yes | Yes | N/A |
| 47 | None | FOMP | PQP-D-S | Annual Grassland, Coastal Scrub, Urban/Developed Land | Yes | No | N/A |
| 52 | 69.86/69.86 | GMPAP | RC/10-UR-D-S | Mixed Conifer Forest, Oak Woodland, Annual Grassland Coastal Scrub, Urban/Developed Land | Yes | Yes | Highly Sensitive |
| 54 | 1.30/1.30 | CVMP | VO-B-6-D-S-RAZ | Urban/Developed Land | Yes | Yes | Sensitive |
| 55 | 3.88/4.33 | CVMP | VO-D-S-RAZ and LDR/1-D-S-RAZ | Urban/Developed Land | Yes | Yes | Sensitive |
| 56 | 1.63/1.63 | CVMP | LDR/1-D-S-RAZ and LDR/B-6-D-S-RAZ | Freshwater Marsh, Oak Woodland, Urban/Developed Land | Yes | Yes | Sensitive |
| | 4.19/4.19 | | | | | | Highly Sensitive |

**Source**: County of Monterey 2026a, 2026b; Appendix G.

**Notes:** CALUP = Carmel Area Land Use Plan; CLUP = County Land Use Plan; CSVAP = Central Salinas Valley Area Plan; CVMP = Carmel Valley Master Plan; FOMP = Fort Ord Master Plan; GMPAP = Greater Monterey Peninsula Area Plan; GSAP = Greater Salinas Area Plan; NCAP = North Coastal Area Plan; NCLUP = North County Land Use Plan

[1] Sites 39 and 43 are identified as Urban/Developed Land and Mixed Conifer Forest, respectively, based on the Biological Resources Technical Report (Appendix G), which relies on the 2013 U.S. Forest Service/USFWS mapping database; however, this data has limitations, and we acknowledge that aerial photographs show Site 39 as heavily vegetated and Site 43 as developed with a residential unit and ancillary structure amid vacant and vegetated areas. The site-specific conditions for both sites will be evaluated at the time of project application, and the PEIR notes these discrepancies.

### 4.1.2.3 Opportunity Sites with Slopes

Figures 4.1-3a through 4.1-3i, Areas with Slopes of 25% or Greater, illustrate areas with slopes of 25 percent or greater. Table 4.1-3, Opportunity Sites with Slopes Exceeding 25 Percent, identifies the acreage of slopes greater than 25 percent within each opportunity site and the percentage of the total site area occupied by these slopes.

A total of 33 opportunity sites contain some areas with slopes greater than 25 percent, regardless of how small the sloped area is relative to the overall site. However, only two sites—Opportunity Sites 39 and 40—contain slopes exceeding 25 percent across more than 50 percent of the site, with

approximately 90 percent and 65 percent slope coverage, respectively. The remaining sites contain only limited areas with slopes greater than 25 percent.

**Table 4.1-3. Opportunity Sites with Slopes Exceeding 25 Percent**

| Opportunity Site No. | Planning Area | Slope Greater Than 25% Acreage | Total Site Acreage | Slope Coverage |
|---|---|---|---|---|
| 1 | GSAP | 0.088 | 95.310 | 0.09% |
| 4 | GSAP | 0.337 | 12.245 | 2.76% |
| 5 | GSAP | 0.003 | 4.041 | 0.09% |
| 6 | GSAP | 0.009 | 1.542 | 0.60% |
| 8 | NCAP (Inland) | 0.751 | 4.246 | 17.70% |
| 9 | NCAP (Inland) | 1.368 | 4.093 | 33.43% |
| 10 | NCAP (Inland) | 1.070 | 7.013 | 15.25% |
| 13 | NCAP (Inland) | 0.049 | 7.013 | 0.69% |
| 14 | NCAP (Inland) | 0.032 | 1.537 | 2.07% |
| 15 | NCAP (Inland) | 0.168 | 2.351 | 7.13% |
| 16 | CLUP – CALUP | 0.528 | 4.463 | 11.82% |
| 22 | CVMP | 0.067 | 6.250 | 1.07% |
| 24 | Toro Area Plan | 0.020 | 31.529 | 0.06% |
| 25 | CSVAP | 0.079 | 5.661 | 1.39% |
| 29 | CSVAP | 0.0002 | 0.986 | 0.02% |
| 31 | FOMP | 0.223 | 12.941 | 1.73% |
| 32 | CSVAP | 0.015 | 1.577 | 0.97% |
| 35 | CVMP | 0.0134 | 3.934 | 0.35% |
| 38 | CVMP | 0.108 | 4.791 | 2.26% |
| 39 | NCAP (Inland) | 0.472 | 0.526 | 89.85% |
| 40 | GMPAP | 17.255 | 26.781 | 64.43% |
| 42 | CSVAP | 0.055 | 2.632 | 2.10% |
| 43 | CLUP – CALUP | 0.273 | 1.572 | 17.40% |
| 44 | NCAP (Inland) | 1.550 | 14.519 | 10.68% |
| 45 | GMPAP | 1.929 | 4.622 | 41.73% |
| 46 | GMPAP | 4.399 | 19.587 | 22.46% |
| 47 | FOMP | 6.941 | 101.235 | 6.86% |
| 48 | CLUP – NCLUP (Coastal) | 0.252 | 16.088 | 1.57% |
| 52 | GMPAP | 0.029 | 69.864 | 0.04% |
| 53 | N/A (City of Marina) | 0.365 | 47.516 | 0.77% |
| 54 | CVMP | 0.019 | 1.297 | 1.47% |
| 55 | CVMP | 0.827 | 4.325 | 19.13% |
| 56 | CVMP | 0.609 | 5.825 | 10.45% |

**Source:** County of Monterey 2026.

**Notes:** CALUP = Carmel Area Land Use Plan; CLUP = County Land Use Plan; CSVAP = Central Salinas Valley Area Plan; CVMP = Carmel Valley Master Plan; FOMP = Fort Ord Master Plan; GMPAP = Greater Monterey Peninsula Area Plan; GSAP = Greater Salinas Area Plan; NCAP = North Coastal Area Plan; NCLUP = North County Land Use Plan

### Light and Glare

Existing sources of light and glare in Monterey County are primarily associated with cities and developed unincorporated areas. Sources of light in these areas include exterior and interior building lighting, illuminated signs, streetlights, and signals. Sources of glare in these areas include windows and reflective building materials such as metal roofs. Mobile sources of light and glare originate from vehicles, airplanes, trains, and farm equipment.

## 4.1.3 Method of Analysis

Evaluating visual impacts is inherently subjective, as there are no quantifiable thresholds for aesthetic quality and perceptions of visual attractiveness vary among viewers. For California Environmental Quality Act (CEQA) analysis, aesthetic impacts were assessed based on the physical proximity of opportunity sites to state- and County-designated scenic highways and routes; the County's visual sensitivity GIS data; County's slopes over 25 percent data, and the Federal Highway Administration's Visual Impact Assessment for Highway Projects (FHWA 2015), which provides guiding questions to evaluate visual compatibility. Note that the County's visual sensitivity GIS data classifies areas as "sensitive," "highly sensitive," and "critical viewshed." These classifications generally encompass areas visible from public roads, trails, recreation areas, prominent or major viewpoints, and designated scenic roads or highways, as well as locations that possess unique visual quality, natural scenic character, or aesthetic value.

The HEU6 is a programmatic policy document and does not propose specific development projects. Because no individual projects are currently proposed, no project-level design features are available for review to determine site-specific visual impacts. Therefore, any future development projects in areas with potential for substantial visual impacts would be subject to project-level review in accordance with the new by-right housing ordinance with objective design standards, existing County Codes, and applicable mitigation requirements.

## 4.1.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on aesthetics if it would:

- **Threshold 1:** Would the project have a substantial adverse effect on a scenic vista.
- **Threshold 2:** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- **Threshold 3:** In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that

are experienced from publicly accessible vantage point.) If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

- **Threshold 4:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## 4.1.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to aesthetics that could result from implementation of the project.

### 4.1.5.1 Threshold 1: Scenic Vistas

**Threshold 1:** Would the project have a substantial adverse effect on a scenic vista?

### Impact Analysis

The project would facilitate higher density residential development than currently allowed under existing zoning in County-designated visually sensitive areas and/or areas located along a visual sensitivity roadway or ridgelines as identified in the LCP or 2010 General Plan.

As shown in Table 4.1-2, a total of 23 opportunity sites are currently located wholly or partially within the Design Control (D) zoning overlay (Opportunity Sites 16 through 24, 31, 35 through 38, 40, 43, and 45 through 47, 52, 54 through 56). Additionally, 19 of the opportunity sites in the D overlay district are also in the Site Plan Review (S) overly zoning district. The requirements for D and S overlay districts are described in Section 4.1.1.3. Note that while the County Code, Chapters 20.44 and 21.44, for the D overlay district do not specify requirements for the Staking and/or Flagging Criteria; the County's Staking and/or Flagging Criteria indicates that staking and/or flagging shall be required when all or part of the project site is designated with a Design Overlay (D).

Upon implementation, the existing Design Control (D) and Site Plan Review (S) zoning overlays would be removed from these sites, rendering the protective provisions of County Code, Chapters 20.44, 21.44, and 21.45, inapplicable to future development on these parcels. However, the project includes adoption of a by-right housing ordinance that includes objective design standards for qualifying development projects to follow during the Objective Process to ensure that intended purposes of the zoning designations are preserved.

As shown on Figures 4.1-2a through 4.1-2d and listed in Table 4.1-2, 19 opportunity sites (Opportunity Sites 16 through 23, 35 through 38, 40, 43, 45, 52, and 54 through 56) are identified as having sensitive or highly sensitive visual sensitivity, and all of these 19 opportunity sites are identified as having D zoning overlay. No opportunity sites are classified as having critical viewshed, and four opportunity sites (Opportunity Sites 40, 45, and 52 in the Greater Monterey Peninsula Area Plan, and Opportunity Site 56 in the Carmel Valley Master Plan) are mapped as having "high" visual sensitivity while the remaining 15 have "sensitive" visual sensitivity.

There are 32 opportunity sites that are adjacent to or near existing and proposed scenic highways or routes. Of these 32 opportunity sites, 21 sites are identified as being within visual sensitivity area and/or have "D" and "S" zoning district overlays. There are total of 18 opportunity sites that are identified to be within a visual sensitivity area, designated as "D" and "S" districts, and located adjacent to or near scenic highway or routes.

The Circulation Element has policies to maintain and enhance a system scenic roads and highways and supports land use controls and development standards to ensure that development and land use in the scenic highway corridors are compatible with the surrounding area. Therefore, development of high density housing units adjacent to or near existing or proposed scenic highways and routes could result in potentially significant impacts unless appropriate design controls are implemented.

**Carmel Valley Master Plan:** Opportunity Sites 17 through 23, 35 through 38, and 54 through 56 are in the Carmel Valley Master Plan area and are currently subject to "D" and "S" overlay zoning districts and mapped visual sensitivity classifications. They are also adjacent to or near Caltrans and County-designated scenic highways and routes (i.e., Highway 1, Carmel Valley Road, and Robinson Canyon Road). Opportunity Site 56 contains both "highly sensitive" and "sensitive" areas. As discussed in Section 4.1.1.3, Carmel Valley Master Plan Policy CV-20 establishes development guidelines for properties within "D" and "S" overlay designations. These policies require development to be visually compatible with the character of Carmel Valley and the surrounding area, or to enhance areas previously degraded by existing development. Policy CV-20 also requires building materials and colors to be compatible with both the structural design of the building and the surrounding natural and built environment; limits building height and bulk to maintain appropriate scale; encourages siting and roadway design that minimizes interruption of public views; and requires minimization of grading, erosion, and alteration of natural landforms through measures such as stepped designs and pole foundations. In addition, Policy CV-3.1 requires a minimum 100-foot setback from Carmel Valley Road for abutting properties. Opportunity Site 38 would be subject to this setback requirement. Policy CV-3.2 requires public vista areas to be provided and improved. CV-3.3 further requires that development not substantially obstruct views of the viewshed, Carmel River corridor, or distant hillsides from key public viewing areas, including Garland Ranch Regional Park, Carmel Valley Road, and Laureles Grade Road. Policy CV-3.4 requires alteration of hillsides and natural landforms to be minimized. In addition, Policies CV-3.8 through CV-3.12 promote the preservation of native vegetation and habitat diversity through requirements related to landscaping, erosion control, and tree removal permitting. Policy CV-3.18 provides standards for aboveground transmission facilities

Opportunity Site 55 is in the Carmel Valley Village and is subject to additional detailed development standards addressing grading, building siting, setbacks, architecture, materials, and colors intended to minimize visual impacts pursuant to the Carmel Valley Village Design Criteria, which requires review for discretionary approval or other permits. These standards include, among

other requirements, a 30-foot setback from Carmel Valley Road for abutting properties. Instead of discretionary review of projects in the Carmel Valley Village, development of Opportunity Site 55 would be subject to the by-right ordinance and associated objective design standards.

**Greater Monterey Peninsula Area Plan:** Four opportunity sites, Opportunity Sites 40, 45, 46, and 52, are in the Greater Monterey Peninsula Area Plan area. Opportunity Sites 40, 45, and 52 are shown as "highly sensitive" on the County's visual sensitive map, and Opportunity Site 46 is not shown on the Visual Sensitivity Map. All four opportunity sites are designated as "D" and "S" zoning overlay and also near Caltrans-designated scenic highway (i.e., Highway 68 and Highway 1). With project implementation, these sites would be rezoned to HDR/30, and the current "D" and "S" zoning overlays would be removed for those portions of the site to facilitate housing production. However, to ensure visual resources protection in the absence of discretionary design review under the Objective Process, the County would implement the by-right-housing ordinance that includes strict and measurable Objective Design Standards (ODS) as outlined in Mitigation Measure (MM-)AES-OBJ-1.

For Opportunity Sites 45, 46, and 52, potential impacts to scenic vistas would be minimized through a proposed split zoning strategy. This strategy would preserve the current zoning on the environmentally and visually sensitive areas of these sites. By restricting the development footprint to the less sensitive portions of these sites, the project would comply with Policies GMP-1.4 and 1.5 (protection of rural atmosphere) and Policies GMP-3.1 through GMP-3.6 (minimizing visual impacts). Furthermore, housing development on Sites 45, 46, and 52 would be subject to ODSs regulating height, massing, and architectural compatibility, ensuring that ridgelines, canyon edges, and hilltops are protected in accordance with Policy GMP-3.2.

Unlike the other three sites, no split zoning is proposed for Opportunity Site 40. Opportunity Site 40 encompasses 26.78 acres with highly sensitive visual sensitivity, approximately 180 feet from Highway 1, and consists of mixed conifer forest and oak woodland. Furthermore, approximately 17 acres (64 percent) of the site contains slopes exceeding 25 percent. As shown on Figure 4.1-2c, Opportunity Sites 40 and 45 are part of a large area designated as having highly sensitive visual sensitivity with undulating terrains that form a contiguous, uninterrupted scenic viewshed visible from common public viewing areas along Caltrans-designated scenic highways.

Policy GMP-3.3 includes development standards for "highly sensitive" areas, which indicates that new development should not be sited on those portions of property that have been mapped as highly sensitive, unless development is sited in a manner that minimizes visible effects of proposed structures and road to the greatest extent possible and to maintain the visual character of the area. Considering that the site is comprised of mixed conifer forest and oak woodland, a large number of trees would need to be removed, and also considering that 64 percent of the site is comprised of slopes exceeding 25 percent, substantial alterations to landform are also anticipated, which could

result in the interruption of a panoramic public viewshed; therefore, resulting in potentially significant impacts to scenic vista. Policy GMP-3.3 stipulates that new development in areas mapped as "sensitive" or "highly sensitive" and which would be visible from a designated scenic route shall maintain the visual character of the area, and requires visual impacts to be reduced through 1) using appropriate siting, design, materials, and landscaping to be compatible with the visual character of the areas; 2) requiring maintenance of no less than a 100-foot setback from the scenic route right-of-way; 3) requiring earth movement to not result in permanent scarring; 4) minimizing tree removal; 5) providing landscaping screening and restoration consisting of surrounding native vegetation; 6) requiring architectural review; and 7) minimizing new development in open grassland areas that interrupts viewshed. These standards have been incorporated into the ODS to reduce physical visual impacts.

**Fort Ord Master Plan:** Two opportunity sites (Opportunity Sites 31 and 47) are in the Fort Ord Master Plan. Although they have D and S overlay zoning designations, they are not mapped by the County Visual Sensitivity Map nor within 0.25 mile of a scenic highway or route. There are a number of policies pertaining to protecting existing natural and built environment. As discussed in Section 4.1.1.3, the Fort Ord Master Plan policies require the County to review each application for compatibility with adjacent open space land uses and to provide suitable open space buffers (Recreation/Open Space Land Use Policy Program B-2.1) and encourage clustering of all types of land uses (Recreation/Open Space Land Use Policy Program B-2.2). Opportunity Site 31 is currently vacant and contains oak woodland, annual grassland, coastal scrub, and urban developed land. However, the site is adjacent to existing residential development to the east and west, where residential uses have been developed with appropriate open space buffers through clustered development.

Opportunity Site 47 is immediately north of Opportunity Site 46 and approximately 0.34 mile from Highway 68, a Caltrans-designated scenic highway. The site would be split zoned between HDR/30 and PQP-D-S to address safety hazards associated with operations at the Monterey Regional Airport, including but not limited to compliance with Federal Aviation Administration Part 77 height restrictions limiting structures to a maximum height of 100 feet. Only approximately 15 acres of the 98.4-acre site would be rezoned to HDR/30. A portion of Opportunity Site 47 is already developed with a soccer field, football field, and track, and approximately 17 acres have previously been disturbed by these recreational uses. Future housing development would occur in accordance with the by-right housing ordinance and associated ODS, which are intended to reduce visual impacts.

**Toto Area Plan:** One opportunity site (Opportunity Site 24) is the Toto Area Plan area. This site is zoned D and S overlays and is approximately 145 feet from the Highway 68 offramp but is not mapped as having sensitive visual sensitivity. Opportunity Site 24 contains agricultural land, urban/development land within the Affordable Housing Overlay (AHO) as shown on Figure AHO-3 for Highway 68 and Reservation Road in the 2010 General Plan. Opportunity Site 24 has

Reservation Road frontage, which is a proposed County scenic route. Toro Area Plan Policy T-3.3 requires a 100-foot setback with dedicated open space easements on lots adjacent to County and State-designated scenic routes. Opportunity Site 24 is outside the 100-foot setback requirement for Highway 68, and a 100-foot setback from Reservation Road is not warranted per Policy T-3.3. Other policies include various development standards to reduce impacts from lighting, steep slopes, and to protect trees. Future housing development would occur in accordance with the by-right housing ordinance and associated ODS, which are intended to reduce aesthetic-related impacts, including, but not limited to exterior lighting, grading, and tree protection.

**North County Area Plan (Inland):** Opportunity Sites 8, 9, 10, 14, 15, 30, 39, 41, and 44 are within 0.25 mile of Caltrans-designated scenic highways (i.e., Highways 101 and 156). However, none of these are identified on the County's visual sensitivity maps or located within D or S overlay zoning districts.

Opportunity Sites 8 and 9 are vacant, and each contain slope that exceeds 25 percent across approximately 18 percent and 33 percent of the sites, respectively. Opportunity Site 8 is undeveloped with a mix of conifer and oak trees and grassland, and is immediately north of the Summerhill Mobile Home Park. Opportunity Site 9 is also undeveloped with grassland and oak trees and is surrounded by Summerhill Mobile Home Park to the east, single-family residences to the south, and an undeveloped lot to the north. In addition, San Miquel Canyon Road crosses Opportunity Site 9 in northeast–south direction near the western boundary. Opportunity Site 10 consists of a portion of the parking lot serving a commercial shopping center at the southwest corner of the site, a paved shared access road serving parcels north of the site that lack direct street frontage, and a vacant area containing grass land and trees. Opportunity Site 10 would be split zoned to accommodate the existing commercial shopping center, which would remain at the southwest corner of the site.

Opportunity Site 39 is undeveloped and is identified as having slopes that exceed 25 percent in approximately 90 percent of the site.

Opportunity Site 44 consists of vacant 8.50 acres of a 14.52-acre site containing a commercial development and the Prunedale Branch Library. Only the vacant portion of the site would be rezoned to HDR/25, and the remaining area would retain the existing light commercial (LC) zoning. In addition, the site is surrounded by other non-residential uses to the east and west and is not part of a continuous scenic vista.

The North County Area Plan includes policies that aim to preserve and protect the area's native vegetation, including trees, and natural scenic qualities, and developing on slopes with 1) highly erodible soils, 2) in excess of 25 percent, and 3) that drain into the watershed of the Elkhorn and Moro Sloughs.

Opportunity Sites 14 and 15 are in the Merritt Street Corridor Opportunity Area of the Castroville Community Plan. The Merritt Street Corridor Opportunity Area is a designated mixed-use revitalization area in Castroville. Opportunity Site 14 is vacant except for the existing garage in the northern section of the site and abuts the Tembladero Slough to the south. Opportunity Site 15 is also vacant and abuts the Tembladero Slough to the south. Opportunity Site 30 is largely vacant except two housing units in the northeast corner of the site, and Opportunity Site 41 is vacant. Both Opportunity Sites 30 and 41 are in the Castroville Community Plan area and border residential uses to the north and east across streets. All opportunity sites in the Castroville Community Plan area are required to comply with the Castroville Community Plan Design Guidelines, which address site design, architectural design, lighting, landscaping, parking, and signage. If a project is determined to involve historical resources, development would be required to comply with the Design Guidelines and the requirements of the County's Historic Resources Review Board to preserve the community's historic character. Opportunity Sites 11 through 15 in Castroville Community Plan area would be split zoned to HDR/30 and RC, therefore preserving areas abutting Tembladero Slough.

**Central Salinas Valley Master Plan:** Opportunity Sites 33 and 34 are within 0.25 mile of State 198, a Caltrans-designated scenic highway. However, these sites are already fully developed and are not mapped in the Visual Sensitivity Map or have D or S overlay zoning districts. Residential developments are required to be designed so that public views are not disrupted.

**Carmel Area Land Use Plan:** Two opportunity sites (Opportunity Sites 16 and 43) are in the Carmel Area Land Use Plan and are mapped sensitive by the County Visual Sensitivity Map (refer to Figure 4.1-2c), are subject to a D overlay zoning district, and include a small portion of street frontage along Highway 1, a Caltrans-designated scenic highway. Except for this approximately 45-foot frontage, the remainder of each site is approximately 120 feet from Highway 1, with other residential lots situated between the sites and the highway.

Opportunity Site 16 is an abandoned convalescent home, while the remainder of the site contains mixed conifer trees. Approximately 12 percent of the site has slopes exceeding 25 percent.

Opportunity Site 43 contains an existing residential development in the southeast corner of the parcel, along with ancillary structures. The site is owned by Stevenson School, which is directly south of the site. The proposed zoning would split the site between the HDR/30 and PQP-D-S zoning districts and would retain the existing residential structure.

The sites are also in the general area identified as "viewshed" or "public viewshed" that refers to the composite area visible from major public use areas including views of Highway 1 and Pescadero Canyon. Resource Management Key Policy 2.2.2 for visual resources states that all future development within the viewshed must harmonize and be clearly subordinate to the natural scenic character of the area, and further states that all categories of public and private land use and

development including all structures, the construction of public and private roads, utilities, and lighting must conform to the basic viewshed policy of minimum visibility. Some of the relevant general policies include designing new lots and access to minimize tree removal and visually intrusive grading; using appropriate materials to blend structures into the environment; using plant and tree species consistent with the surrounding vegetation as landscape screening; and restoration and avoiding screening on open grassy slopes and ridges. Relevant Specific Policies (Section 2.2.4 of the Resource Management chapter) include requiring individual on-site investigations for all applications for development within the viewshed (Section 2.2.4.1) and applying specific siting and design control measures such as not locating buildings on slopes exceeding 30 percent, except when all other plan guides are met (Section 2.2.4.10.a) clustering of new residential (Section 2.2.4.10.b), designing so that they blend into the site and surroundings, providing general appearance of natural materials for the exterior of the building (Section 2.2.4.10.c), adequately shielding lighting (Section 2.2.4.10.d), and retaining existing trees and other native vegetation to the maximum extent possible (Section 2.2.4.10.e). Opportunity Site 16 has D zoning overlay, and Opportunity Site 43 has D and S overlays.

As summarized in Table 4.1-2, Opportunity Sites 8, 9, 10, 14 through 24, 30, 31, 33 through 41, 43 through 47, 52, 54, 55, and 56 are in the D and S overlay zones or mapped as being within sensitive or highly sensitive visual sensitivity areas or within 0.25 mile of a designated Caltrans scenic highway or existing or proposed County scenic highways and routes. As listed in Table 4.1-3, there are also sites that contain slopes exceeding 25 percent and development could occur along ridgelines. Development on these sites would require removal of native vegetation and habitat, removal of trees, alteration to existing topography, and development of structures that could change the scenic character of the area or obstruct scenic vistas from common public viewing areas. As discussed above, to reduce physical impacts, the HEU6 has incorporated split zoning strategy for Opportunity Sites 10, 11, 12, 13, 14, 15, 38, 43, 44, 45, 46, 47, 52, and 56 to reduce impacts to environmentally sensitive resources, be consistent with airport land use compatibility considerations, to accommodate existing uses, and in some cases, to minimize visual impacts. The split zone strategy would limit the high density residential footprint to less sensitive portions of those parcels and preserve natural features, thereby minimizing adverse change in scenic vistas and quality. Nonetheless, projects do not include actual development projects, and site-specific visual impact will need to be evaluated at the time of project application.

Provisions per the 2010 General Plan (including area plans, master plans, and community plans), LCP Land Use Plans, County Code, and Coastal Implementation Plans (CIPs), as described in Section 4.1.1.3, currently work together to ensure that adverse visual impacts from development are minimized. Development in visually sensitive areas is not prohibited but is subject to additional plan and design reviews to minimize adverse visual impacts and ensure visual compatibility with surrounding areas. Some of these policies were originally developed for low-density or rural development contexts, whereas the project includes General Plan, LCP, and County Code

amendments to facilitate higher density residential development on the opportunity sites. As part of project implementation, all opportunity sites would be rezoned to High Density Residential (HDR/25 or HDR/30), the existing Design Control (D) and Site Plan Review (S) zoning overlays would be removed, and the existing zoning provisions would be amended to provide provisions for the newly created zoning districts. As a result, the project would allow increased building height, massing, and other site and building design elements, thereby increasing the potential to obstruct scenic vistas and alter the visual character of the surrounding area. Therefore, the project would result in potentially significant aesthetic impacts.

## Significance of Impact

Potentially significant impact.

## Mitigation Measures

Visual resources review of HEU6 residential development projects will be required through MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 below.

**MM-AES-OBJ-1: Objective Design Standards.** As part of the Project, the County of Monterey shall adopt the Model Objective Design Standards (Model ODS) (Appendix G). These standards shall apply Countywide in UMC to qualifying developments. As outlined below, the County of Monterey (County) shall revise and update the Model ODS, as included in the by-right housing ordinance, to incorporate applicable community and place-specific design standards related to architectural style, height, and other unique neighborhood characteristics as necessary for each area plan, master plan, land use plan, and community plan area as well as the standards detailed in Mitigation Measure MM-AES-OBJ-2.

To ensure orderly implementation, the County shall revise the Model ODS as follows:

- Interim Substantial Conformance: Within two years of the adoption of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), the County shall adopt interim ODS checklists prioritizing plan areas that have existing, established design guidelines and development standards.
- Final Model ODS: Following the implementation of the interim ODS checklist for applicable master plan and community plan areas, the County shall finalize the community and place-specific Model ODS amendments for the applicable area plan, master plan, land use plan, and community plan areas.

**MM-AES-OBJ-2: Visual Resources Protection.** By-right development project streaming under the Objective Process that are mapped by the County of Monterey (County) Visual Sensitivity Map, or previously zoned with a Design Control (D), Site Plan Review (S), or Visual Sensitivity (VS) zoning districts, or within 0.25 mile of an officially

designated State Scenic Highway or existing or proposed County Scenic routes, as listed in Table 4.1-2, Summary of Opportunity Sites with Visual Sensitivity, of this Program Environmental Impact Report; or are located along ridgelines identified in the 2010 General Plan or Local Coastal Plans; or on slopes exceeding 30 percent (25 percent in North County Area Plan (Inland) area and North County Land Use Plan (Coastal) area as outlined in Sections 21.64.230 and 20.64.230, the standards listed below, in addition to the standards listed in (and any future revisions to) the Model ODS, pursuant to Mitigation Measure MM-AES-OBJ-1, shall apply:

**A. Tree Removal Standards.** Tree removal shall be minimized to only those trees necessary to accommodate the development and shall obtain a separate tree removal permit, which may be processed prior to or concurrently with the development approval. See Monterey County Code, Chapter 16.60 and Section 21.64.260, Preservation of Oak and Other Protected Trees, for processing and required materials of ministerial tree removal for projects in inland areas. See Section 20.146.060 of the Monterey County Coastal Implementation Plan, Regulations for Development in the Carmel Area Land Use Plan (CIP for Carmel Area LUP), and Section 20.144.050 of the Monterey County CIP, Regulations for Development in the North County LUP Area (CIP for North County LUP) for processing and required materials of ministerial tree removal for projects in coastal areas.

**B. Tree Removal Standards for Projects Proposing Removal for Fire Fuel Management.** In addition to MM-AES-OBJ-2(A), the following standards shall apply:

Projects that are proposing removal of trees to comply with required fire clearance shall submit a tree removal plan and fire fuel management plan for review and approval by the County and the Appropriate Fire Authority as required by Title 21 (Zoning – Inland) and Title 20 (Zoning – Coastal) prior to issuance of a construction permit. The tree removal plan and fire fuel management plan shall show the proposed removal locations, proposed replanting locations, and ratios of removal to replanting. Removal and replanting shall identify tree planting areas with suitable soils that will also fulfill landscape plans and visual screening objectives, as feasible. Visual screening objectives shall include minimizing impacts on visually scenic resources as identified by the 2010 General Plan, Monterey County Code, and applicable Land Use Plan.

**C. Initial Evaluation for Sites with the Potential to Impact Visually Sensitive Resources.**

1. The project planner shall conduct an initial on-site inspection to determine whether the project is within the public viewshed and could potentially result in significant visual resources impact. This determination shall be made within

30 days of the receipt of the project application. The initial inspection shall determine whether the proposed project has the potential to create a substantially adverse visual impact when viewed from a common public viewing area under normal, unaided viewing conditions.

2. If the initial on-site inspection indicates that any portion of the project has the potential to create a substantially adverse visual impact when viewed from a common public viewing area, that portion of the project shall be staked in accordance with the "County-wide Staking and Flagging Criteria" before the project application may be considered complete.
3. The location of proposed access roads shall also be accurately identified by stakes and flags.
4. Upon completion of project staking in accordance with the "County-wide Staking and Flagging Criteria", a subsequent on-site inspection shall be conducted with 30 days to assess whether the project would create substantially adverse visual impacts when viewed from a common public viewing area.

**D. Design Modifications.** If a project is determined to result in unacceptable visual impact after B. Initial Evaluation for Sites with the Potential to Impact Visual Resources, the project design shall be modified to minimize the project's visibility.

**1. Minimize Impacts to Surrounding Community.** Development projects shall protect visual resources from common viewing areas to the extent feasible and ensure compatibility with the existing surrounding area, natural topography, and vegetation by adhering to the Model ODS required under MM-AES-OBJ-1, including, but not limited to, the following or similar topics to minimize impacts on visual resources.

- **Building Design.** Building form, height, massing, setbacks, orientation, material, color, texture, wall and roofline variations, projections, windows, decorative architectural details, etc.
- **Site Design.** Building placement and orientation, including street façade and visibility of entrances, buffer, access, open space, landscaping, etc.
- **Other Site Features.** Waste collection facilities, mechanical equipment screening, fences and walls, accessory structures, exterior lighting (fixture types, light trespass, maximum height, prohibited lighting).

**2. Design Standards – All Projects:** Development projects, except as otherwise provided below, shall be sited and designed to minimize visibility from common public viewing areas using the standards listed below, or as revised by the Model ODS or any subsequent community and place-specific ODS:

**a. Site and Building Design.** Project design (including building height, massing, setbacks, and orientation) shall use the following or similar techniques to avoid or substantially reduce obstruction of identified scenic vistas and public views:

1. Lot configurations which provide high potential for each building site to be screened by existing or proposed topography and vegetation;
2. Specified building sites and new access road locations that allow for screening by existing or proposed topography and vegetation, minimized grading, minimized tree removal, and development on less than thirty (30) percent slopes;
3. Clustering of structures, with visually significant wooded hills and ridges placed in open space or scenic easement.

**b. Scenic Resource Identification.** Key public view corridors toward scenic features (e.g., ridgelines, open space, coastal lines) shall be identified and preserved to the extent feasible through building placement and site layout.

**c. Avoid Ridgelines.** Projects to the extent feasible, should be sited avoid being on ridgelines or crests of a hill where the structure has potential to create a silhouette or other substantially adverse impact when viewed from a common public viewing area. When proposed on or near a ridgeline, the applicant will be required to demonstrate that no feasible alternative location exists on the parcel.

**d. Compatibility with Surrounding Character.** Projects shall use materials, colors, and landscaping that minimize visual contrast with surrounding natural or built character.

**e. Grading.** The impact of any earth movement associated with the development shall be mitigated in such a manner that permanent scarring is not created and grading and landform alteration visible from scenic corridors shall be minimized. See MM-WF-OBJ-5: Steep Slope Requirement.

**f. Below Ground Utilities.** New utility and transmission lines shall be placed underground, except upon demonstration that:

1. The utility provider is unable feasibly to place utilities underground; or
2. Overhead utilities will not have the potential to create substantially adverse visual impacts when viewed from a common public viewing

area due to poles and lines being screened by existing or proposed topography or vegetation; or

3. Overhead utilities will better protect resources of the property and area.

3. **Carmel Valley Master Plan Standards.** Development projects within the Carmel Valley Master Plan area shall be sited and designed to protect scenic and visual resources and minimize visibility from common public viewing areas by implementing applicable development and siting policies in the Carmel Valley Master Plan, as amended, including, but not limited to, Policies CV-1.8, CV-1.9, CV-1.20, CV-2.3, CV-2.5, CV-2.6, CV-2.7, CV-2.9, CV-2.14, CV-2.16, CV-3.1 through CV-3.19, CV-3.22, and CV-6.2.

4. **Carmel Valley Village Standards.** Development projects within the Carmel Valley Village area shall be sited and designed to protect scenic and visual resources and minimize visibility from common public viewing areas by implementing the Carmel Valley Village Development Criteria, or as revised by the Model ODS or any subsequent ODS adopted for the Carmel Valley Master Plan and/or Carmel Valley Village area, as applicable.

5. **Castroville Community Plan Standards.** Development projects within the Castroville Community Plan area shall be sited and designed to protect scenic and visual resources and minimize visibility from common public viewing areas by implementing Appendix A, Design Guidelines, and Appendix B, Development Standards, of the Castroville Community Plan.

6. **Carmel Area Land Use Plan Standards.** Development projects within the Carmel Area Land Use Plan area shall be sited and designed to protect scenic and visual resources and minimize visibility from common public viewing areas using the development standards in Section 20.146.030, Visual Resources Development Standards, of the CIP for the Carmel Area Land Use Plan, or as revised by the Model ODS or any subsequent ODS adopted for the Carmel Area Land Use Plan.

7. **North County Land Use Plan Standards.** Development projects within the North County Land Use Plan (Coastal) area shall be sited and designed to protect scenic and visual resources and minimize visibility from common public viewing areas using the development standards in Section 20.144.030, Visual Resources Development Standards, of the CIP for the North County Land Use Plan, or as revised by the Model ODS or any subsequent ODS adopted for the North County Land Use Plan.

**MM-AES-CONS-3:** Development projects streamlining under the Consistency Process that are mapped by the County of Monterey Visual Sensitivity Map, or previously zoned with a Design Control (D), Site Control (S), or Visual Sensitivity (VS) overlays, or within 100 feet of an officially designated State Scenic Highway or existing or proposed County Scenic Routes, as listed in Table 4.1-2, Summary of Opportunity Sites with Visual Sensitivity, of this Program Environmental Impact Report; or are located along ridgelines identified in the 2010 General Plan or Local Coastal Programs, or on slopes exceeding 30 percent (except for the North County Area Plan and North County Land Use Plan area where slopes exceeding 25 percent) as identified in Sections 21.64.230 and 20.64.230, the following shall apply:

**A. Initial Evaluation for Sites with the Potential to Impact Sensitive Resources.** The project planner shall conduct an initial on-site inspection to determine whether the project is within the public viewshed and could potentially result in significant visual resources impact.

1. An initial on-site inspection shall be required within 30 days of the receipt of the project application. The initial inspection shall be for the purpose of determining whether or not the proposed project may have the potential to create a substantially adverse visual impact when viewed from a common public viewing area in terms of normal, unaided vision for any length of time.

2. If the initial on-site inspection indicates that any portion of the project may have the potential to create a substantially adverse visual impact when viewed from a common public viewing area, such portion of the project shall be staked in accordance with "County-wide Staking and Flagging Criteria" before the project application may be considered complete.

3. When the project staking is completed in accordance with "County-wide Staking and Flagging Criteria", a subsequent on-site inspection shall be made within 30 days to assess the potential for substantially adverse visual impacts of the project when viewed from a common public viewing area.

**B. Development Standards.** If the determination is that a proposed project would result in unacceptable visual impacts, the project site and building design shall be modified and the project applicant shall demonstrate compliance with all development and design standards set forth below and in MM-AES-OBJ-2. Projects shall also comply with applicable County of Monterey regulations including but not limited to: Monterey County Code, Model ODS, applicable area plan, master plan, community plan, and/or land use plan and 2010 General Plan.

### Significance of Impact After Mitigation

Under the Objective Process for qualifying by-right uses, the by-right housing ordinance, objective design standards, environmental protection measures established by ordinance, and other applicable objective requirements and standards would apply, as described in Chapter 3. The County will consider adopting the objective design standards contained in the Draft County of Monterey Model ODS (Appendix D). The Model ODS includes general development standards; however, it is not community- or place-specific. Therefore, although qualifying by-right uses under the Objective Process would be developed to comply with the amended HDR zoning district's site development standards (coastal and inland) and are expected to be generally compatible with the general character of the applicable area plan, master plan, community plan, and LCP Land Use Plan policies, refinements to the Model ODS will be necessary to address community- and place-specific design standards, architectural character, building height, and other unique neighborhood design features. These refinements would be required to ensure that future by-right development minimizes potential impacts to visual resources while maintaining compatibility with the surrounding community, as required by MM-AES-OBJ-1 and MM-AES-OBJ-2. Therefore, until the community- and place-specific ODS is completed, impacts would remain significant and unavoidable.

Under the Consistency Process, projects under HEU6 would be developed to comply with the 2010 General Plan (including area plans, master plans, and community plans), LCP Land Use Plans, the County Code, and CIPs, as amended, including but not limited to the HDR zoning district's site development standards (coastal and inland); County Code, Chapter 16.60, and Section 21.64.260; Section 20.146.060 of the CIP for the Carmel Area LUP; Section 20.144.050 of the CIP for the North County LUP; the Carmel Valley Master Plan; the Carmel Valley Village Development Criteria; the Castroville Community Plan; Section 20.146.030 (Visual Resources Development Standards) of the CIP for the Carmel Area LUP; and Section 20.144.030 (Visual Resources Development Standards) of the CIP for the North County Land Use Plan. With compliance with existing regulatory requirements and implementation of MM-AES-CONS-3, impacts to scenic vistas and visual resources would be mitigated to a less than significant level.

#### 4.1.5.2 Threshold 2: Scenic Resources Within a Scenic Highway

**Threshold 2:** Would the project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

### Impact Analysis

As shown on Figures 4.1-1a through 4.1-1i, State Routes 1, 25, 68, 101, 156, and 183 are officially designated or eligible state scenic highways in Monterey County. As shown in Table 4.1-1, 30 opportunity sites are located within a conservative 0.25-mile radius of these designated or proposed scenic routes. However, proximity alone does not equate to a physical impact on a scenic

highway corridor. Of these 30 sites, five (Opportunity Sites 9, 16, 30, 44, and 52) directly abut or are within 100 feet of a designated scenic highway right-of-way.

The project could facilitate higher density residential development on opportunity sites located near officially designated scenic corridors, resulting in structures with greater height, scale, and massing than allowed under existing zoning. This change in physical form has the potential to substantially damage scenic resources—including native trees, rock outcroppings, and historical structures—visible from or in a state scenic highway viewshed.

The County's operative Local Coastal Program, 2010 General Plan, and area plans enforce robust protections along scenic highways, including architectural and landscape controls, outdoor advertising restrictions, undergrounding of utilities, and mandatory preservation of native roadside vegetation. Furthermore, 19 of the 30 opportunity sites near a scenic highway or route (Sites 16, 18 through 23, 31, 35 through 38, 40, 43, 45 through 47, 54, and 56) are either also currently designated Design Control (D) zoning district or mapped in the Visual Sensitivity Map, or both, therefore, providing additional protection along scenic highways.

However, the HEU6 will rezone opportunity sites to High Density Residential (HDR/25 or HDR/30), and the overlays would no longer be applicable. Also, by-right development projects streamlining under the Objective Process would not be subject to the existing robust protection along scenic highways, as no discretionary actions that implement some of the provisions would be triggered. Therefore, without replacement protection, subsequent high density development on opportunity sites along a scenic highway, or on sites that feature prominent topographic elements visible from the corridors or along ridgelines could result in visually intrusive grading, permanent scarring, or the removal of protected scenic trees and rock outcroppings. Therefore, implementation of the project could result in a potentially significant impact to scenic resources within a state scenic highway.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3.

### Significance of Impact After Mitigation

With compliance with existing 2010 General Plan and LCP policies, the County Code, and CIPs, and implementation of MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3, impacts to scenic resources would be reduced to a less than significant level. However, as discussed in Section 4.1.5.1, the community- and place-specific ODS have not been finalized; until that time, impacts

would remain significant and unavoidable for by-right development project streamlining under the Objective Process.

#### 4.1.5.3 Threshold 3: Visual Character or Quality

**Threshold 3:** In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

### Impact Analysis

Pursuant to CEQA Guidelines, Section 15387, "urbanized area" means a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 people per square mile. Therefore, opportunity sites in UMC are not considered urbanized areas for the purposes of CEQA analysis.

The project would facilitate higher density residential development in areas where such development does not currently exist and, therefore, could substantially alter the existing visual character or quality of public views of affected sites and their surroundings. Potential changes could include modification of existing topography, removal of vegetation, and alteration of natural aesthetic features. However, evaluation of visual resources is inherently subjective, as perceptions of visual quality and aesthetic value vary among individuals. Under CEQA, a change in the visual character of a site does not, by itself, constitute a significant impact. Modification of existing visual conditions is expected with development and does not automatically equate to degradation of visual character or quality. Instead, a project would result in a significant visual impact only if it would substantially degrade the existing visual character or quality of the site and its surroundings as viewed by the public, based on generally accepted visual assessment criteria and applicable planning policies.

The project could result in noticeable changes to the physical characteristics of the environment by facilitating future development that introduces higher density residential buildings in various planning areas. However, noticeable changes in the physical characteristics of a site does not, by itself, constitute an adverse impact.

The project involves rezoning land that could allow for high density residential development. Proposed future development would be required to comply with the amended zoning code for HDR/25 or HDR/30, and go through project-level staff review during the application process for compatibility with surrounding visual resources by using appropriate siting, design, materials, and landscaping. Also, if the opportunity sites have the potential to result in adverse impacts to visual resources, MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 will be incorporated to

reduce visual impacts and ensure compatibility with surrounding environment (refer to Section 4.1.5.1 for further discussion).

No specific development projects are proposed under the HEU6. Instead, the project would facilitate and encourage future housing development to meet the County's state-mandated housing targets as a programmatic action. Therefore, implementation of the HEU6 could result in future construction activities such as vegetation removal, demolition, grading, and building construction. Temporary construction-related visual impacts could occur, as the construction sites would be visible from adjacent roadways and other publicly accessible areas. Therefore, MM-AES-OBJ-4 for by-right development projects streamlining under the Objective Process and MM-AES-CONS-5 for developed projects streamlining under the Consistency Process, requiring fencing or screening material around the active construction area, have been incorporated to reduce these visual impacts by obstructing direct public views of construction activities.

Project-related visual changes would be mitigated through landscaping, setbacks, architectural enhancements, building massing, and articulation through implementation of MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3, and compliance with existing County policies as applicable for various area plan, master plan, and land use plan areas. The County has also incorporated split zoning strategy for Opportunity Sites 10, 11, 12, 13, 14, 15, 38, 43, 44, 45, 46, 47, 52, and 56 to conserve existing uses and natural habitat, thereby avoiding or minimizing adverse change in visual quality.

Therefore, the project would not substantially degrade the existing visual character or quality of public views of affected sites and their surroundings with implementation of MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, MM-AES-OBJ-4 and MM-AES-CONS-5, existing regulatory requirements, and split zoning on some of the sites. However, the place-specific ODS is not available for by-right developments for streamlining projects under the Objective Process, and appropriate design elements to mitigate visual impacts may not be implemented until the time of fully integrated ODS. Therefore, impacts would be significant and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Visual resources review of HEU6 residential development projects will be required through MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3, and MM-AES-OBJ-4 and MM-AES-CONS-5 would reduce visual impacts during construction as described below.

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3.

**MM-AES-OBJ-4: Temporary Fencing for Construction.** Prior to the start of any ground-disturbing or construction activities processed under the Objective Process, the following standards, as described and revised in the County of Monterey Model Objective Design Standards (Model ODS) pursuant to Mitigation Measure MM-AES-OBJ-1, shall apply:

- The applicant shall install temporary protective fencing or screening material (e.g., chain-link fencing with opaque screening fabric, wood-panel barriers, or other County of Monterey–approved materials) around the active construction area to screen construction activities from adjacent roadways, public views, and publicly accessible areas.
- The fencing shall be a minimum of 6 feet in height, shall be maintained in good condition for the duration of construction, and shall remain in place until all major exterior construction activities are complete.

**MM-AES-CONS-5: Temporary Fencing for Construction.** All residential development projects processed under the Consistency Process shall comply with all standards and requirements of Mitigation Measure MM-AES-OBJ-4.

### Significance of Impact After Mitigation

Therefore, the project would not substantially degrade the existing visual character or quality of public views of affected sites and their surroundings with implementation of MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, MM-AES-OBJ-4 and MM-AES-CONS-5, existing regulatory requirements, and split zoning on some of the sites. However, the place-specific ODS is not available for by-right developments for streamlining projects under the Objective Process, and appropriate design elements to mitigate visual impacts may not be implemented. Therefore, impacts would be significant and unavoidable.

## 4.1.5.4 Threshold 4: Light or Glare

**Threshold 4:** Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

### Impact Analysis

Implementation of the HEU6 would facilitate new housing development that could introduce additional sources of light and glare in and around the identified opportunity sites. New light sources would include exterior building lighting, street and parking area lighting, interior light spill from windows, and vehicle headlights associated with increased nighttime traffic. During daytime hours, glare could result from sunlight reflecting off light-colored building materials, metallic surfaces, or windows. Excessive nighttime lighting could also contribute to sky glow, which diminishes visibility of the night sky.

Light trespass, or unwanted light extending onto adjacent properties or roadways, can create nuisance conditions and pose potential safety concerns by reducing visibility. However, the incremental increase in roadway lighting and vehicular headlights would not be substantial, as new trips would be dispersed throughout Monterey County rather than concentrated in a single location. Therefore, the increase in vehicular light sources would not cause substantial adverse effects on surrounding land uses or driver visibility.

Although future development would introduce new lighting sources, such lighting would be subject to County development standards and design review processes intended to minimize light and glare impacts. In the inland areas, County Code, Section 21.63, Design Guidelines for Exterior Lighting, requires that all exterior lighting comply with the Design Guidelines for Exterior Lighting (County of Monterey 2016). These guidelines establish performance standards to ensure lighting is directed downward, shielded to prevent light spill, and limited to the minimum intensity necessary for safety and function. There are also area plans, master plana, and development standards that provide policies related to lighting that requires unobtrusive and harmonious exterior lighting with the local area. Compliance with these requirements would minimize light trespass, glare, and sky glow, and ensure that lighting does not create adverse impacts incompatible with the surrounding visual environment. Therefore, exterior lighting impacts for inland opportunity sites would be less than significant.

For opportunity sites in the coastal land use plan areas, County Code, Section 21.63, does not apply. North County Land Use Plan (coastal) includes Opportunity Site 48, and Carmel Area Land Use Plan includes Opportunity Sites 16 and 43. Lighting standards in the CIP for the North County LUP, CIP for the Carmel Area LUP, and County Code will apply. CIP of the North County LUP, Section 20.144.030.B.2.C, requires lighting to be unobtrusive and blend with the rural setting, and CIP of the Carmel Area Land Use Plan, Section 20.146.030.C.d, requires exterior lighting to be unobtrusive and harmonious with the local area, and lighting fixtures to be adequately shielded and designed at near-ground level so that only the intended area is illuminated and off-site glare is fully controlled. And Section 20.10.060.H (Lighting Plan Requirements for HDR [CZ]) also provides a provision that requires all exterior lighting to be unobtrusive, harmonious with the local area and constructed or located so that only the area intended is illuminated and off-site glare is fully controlled. Even with the compliance with the existing CIP provisions, they do not provide consistent light reduction across all opportunity sites, and new lighting sources from high density residences could have the potential to cause adverse effects on nighttime views or contribute to glare during daylight hours. Therefore, MM-AES-OBJ-6 and MM-AES-CONS-7 have been provided to ensure that these impacts would be reduced to a less than significant level. Additionally, outdoor lighting would be required to comply with applicable CBC Title 24, Part 6, energy efficiency provisions. Although the primary intent of these standards is to conserve energy, they also regulate lighting power, brightness, shielding, and the use of sensor controls, which inherently minimize excessive brightness, light spillover, and glare, thereby reducing potential

light pollution and glare impacts that could affect human comfort and nighttime environments. Each development project is required to meet the appropriate lighting zone standards from CBC Title 24, Part 6.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3.

For projects under the Consistency Process, development in accordance with the County Code, Section 20.10.060.H, Lighting Plan Requirements for HDR (CZ), and Section 21.63, Design Guidelines for Exterior Lighting; CIP of the North County LUP, Section 20.144.030.B.2.C; and CIP of the Carmel Area Land Use Plan, Section 20.146.030.C.d, would reduce potential lighting and glare impacts to less than significant level and no mitigation is required.

**MM-AES-OBJ-6: Light and Glare.** By-right development projects under the Objective Process located in inland zones shall comply with Monterey County Code Section 21.63.020 Design Guidelines for Exterior Lighting. By-right development projects under the Objective Process located in coastal zones, the following standards, as described and revised in the County of Monterey Model Objective Design Standards (Model ODS) pursuant to Mitigation Measure MM-AES-OBJ-1, shall apply.

A. Prior to approval of the final lighting plans, the project designs shall incorporate exterior lighting design that meets the following minimum requirements:

    a) **Location and direction of fixtures –** All exterior lighting fixtures shall feature a certified Full Cutoff (fully shielded) design. Fixtures must be mechanically oriented and angled vertically downward so that the light source (the bulb or LED element) is entirely obscured from the direct horizontal line of sight of public viewing areas, scenic highway corridors, and adjacent properties. Fixture placement must ensure zero direct illumination spills across parcel boundaries.

    b) **Fixture design –** All fixtures shall incorporate the following features:
        - Fully shielded
        - Opaque shielding material is optimal
        - Shielding material may be translucent for residential fixtures of low intensity
        - Fixture should not use sag lens or refracted light components

- Outdoor light output shall be restricted to the minimum number of fixtures necessary to achieve basic safety lighting as required by the Monterey County Building Code.
- All outdoor lighting elements must utilize low-intensity fixtures with a warm-white correlated color temperature (CCT).
- Utilize motion sensors on all exterior lights.

**MM-AES-CON-6:** All residential development projects processed under the Consistency Process shall comply with all standards and requirements of Mitigation Measure MM-AES-OBJ-6.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.1.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to aesthetics that could result from implementation of the project. The geographic context for cumulative aesthetic impacts encompasses the UMC, 12 incorporated cities in Monterey County, and other two counties (Santa Cruz and San Benito counties) in the Association of Monterey Bay Area Governments (AMBAG) region as described in Chapter 4, Environmental Analysis, with a specific analytical focus on the viewsheds, public view corridors, and scenic highway segments in the designated HEU6 opportunity sites, surrounding areas, and respective area plan, master plan, and land use plan areas.

### 4.1.6.1 Cumulative Threshold 1: Scenic Vistas

Past, present, and reasonably foreseeable future projects across the region are undergoing a change toward urban infill and higher density development patterns to comply with California's housing mandates. This regional transformation is introducing taller, multi-story buildings and massing into historically semi-rural, low-density, or agricultural viewsheds, resulting in a significant cumulative modification of the regional visual landscape. Future housing development facilitated by Regional Housing Needs Allocation targets in the AMBAG region could incrementally alter the visual character and composition of scenic vistas along hills and ridges and other visually sensitive areas.

Future projects proposed in visually sensitive areas would be subject to County review for visual compatibility with surrounding land uses and protection of scenic resources and public views as described in Section 4.1.5.1. In addition, applicable 2010 General Plan and Local Coastal Program – Land Use Plan policies, zoning regulations, design standards, CEQA review process, and project-level review procedures are intended to minimize visual incompatibilities and reduce potential obstruction

of scenic vistas. Collectively, these regulatory requirements would reduce the severity of incremental visual changes associated with cumulative development. However, considering the number of housing units assigned in the AMBAG region for the County and surrounding jurisdictions, intrusion into various areas with potential impacts to scenic vistas could occur. Although mitigation would be provided to minimize impacts, assuming full mitigation without a place-specific ODS for by-right development would be speculative. Therefore, the project's incremental addition to the changing visual landscape would be individually and cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.1.6.2 Cumulative Threshold 2: Scenic Resources Within a Scenic Highway

Cumulative development throughout UMC and incorporated cities in Monterey County could collectively contribute to changes in the visual setting of areas visible from State Routes 1, 25, 68, 101, 156, and 183—designated state or County scenic highways and routes. Construction and grading activities associated with multiple projects could temporarily alter views, and long-term changes in building form or height could incrementally affect scenic quality along these corridors. However, the County's 2010 General Plan and Local Coastal Program – Land Use Plan policies require that scenic corridors be protected through measures such as undergrounding utilities, controlling signage, and applying design and landscaping standards that promote compatibility with natural surroundings. Implementation of MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 would ensure that potential visual impacts along scenic highways are minimized. Other cumulative development projects are anticipated to be required to implement similar design review process and to include design strategies that minimize impacts, so that such development does not substantially damage scenic resources within a scenic highway or route. Accordingly, cumulative impacts on scenic resources within or visible from a scenic highway would be less than significant with implementation of mitigation measures. However, until the community- and place-specific ODS described in MM-AES-OBJ-1 are developed and adopted, it would be speculative to conclude that impacts to scenic resources within scenic highway corridors would be fully mitigated. Therefore, impacts would remain significant and unavoidable, and the project's incremental adverse impacts to scenic resources within a scenic highway would be considered cumulatively considerable until that time.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.1.6.3 Cumulative Threshold 3: Visual Character or Quality

The HEU6 and other foreseeable residential or infrastructure projects could collectively alter the visual character of non-urbanized portions of the UMC and adjacent incorporated cities by introducing more intensive land uses, new building forms, and nighttime lighting. The impacts would be greater for opportunity sites bordering the rural/urban interfaces, where growth areas border rural, agricultural, or open space viewsheds. At the rural/urban interface where opportunity sites are located, the concentration of high density residential uses would contrast with the low-density, open, or agricultural character of the adjacent surroundings. The cumulative effect of these urban edge expansions could result in a more abrupt transition between built and natural environments, potentially degrading the existing scenic quality of public views and historical rural vistas.

Nonetheless, the County's 2010 General Plan, the Local Coastal Program – Land Use Plans, the County Code, and CIPs for Land Use Plans contain policies and provisions requiring that development conform to existing landforms, use appropriate materials and colors, and preserve significant natural features. In addition to required compliance with the existing regulatory requirements, incorporation of MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, MM-AES-OBJ-4, and MM-AES-CONS-5 ensures that each project complies with the Model ODS in the by-right housing ordinance or implements various design techniques to maintain compatibility with surrounding visual character and to control visual quality during construction. It is anticipated that other cumulative development projects would also be required to be reviewed and controlled for visual compatibility to ensure visual compatibility with local characteristics and minimize aesthetics impacts. In combination, these regulatory frameworks and programmatic mitigation measures would substantially reduce the individual contribution of HEU6 projects to the degradation of the UMC's visual quality.

However, because the specific Model ODS for each area plan, master plan, community plan, and LCP Land Use Plan have not been fully developed or tailored to every unique rural/urban edge condition, the visual compatibility of future by-right housing developments cannot be fully guaranteed at this programmatic stage. Furthermore, there are other jurisdictions in Monterey County with greater and comparable Regional Housing Needs Allocation targets than the County,

potentially resulting in more development at the urban periphery, altering the current rural/urban edge condition.

Because it cannot be definitively concluded that all future cumulative projects can or will fully mitigate localized interface conflicts, and because assuming complete mitigation across all sites would be speculative, the project's contribution to this regional change in visual character is considered cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, MM-AES-OBJ-4, and MM-AES-CONS-5.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.1.6.4 Cumulative Threshold 4: Light or Glare

Cumulative development associated with the HEU6 and other foreseeable projects would incrementally increase nighttime and daytime lighting and glare conditions across the AMBAG region. Without proper design, such lighting could contribute to cumulative sky glow, glare, or light trespass affecting rural and coastal viewsheds. However, compliance with County Code, Section 21.63 (Design Guidelines for Exterior Lighting), for inland areas would ensure that exterior lighting is fully shielded, directed downward, and limited to the minimum intensity necessary for safety; And Section 20.10.060.H (Lighting Plan Requirements for HDR [CZ]) and Section 20.12.I (Lighting Plan Requirements for MDR [CZ]) would ensure that all exterior lighting is unobtrusive, harmonious with the local area, and constructed or located so that only the area intended is illuminated and off-site glare is fully controlled. CIP of the North County LUP, Section 20.144.030.B.2.C, requires lighting to be unobtrusive and blend with the rural setting. However, because the inland guidelines do not apply in the coastal zone, development on coastal opportunity sites will be strictly governed by MM-AES-OBJ-6, which would implement a unified, objective coastal standard for opportunity sites in the coastal zones. Additionally, programmatic design reviews conducted under MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 ensure that lighting plans, structural massing, and non-reflective building materials are evaluated collectively to eliminate day and nighttime glare contrast with the surrounding natural landscape.

Other independent cumulative development projects within the region would similarly be subject to the strict energy conservation and outdoor lighting controls mandated by the CBC (Title 24, Part 6), as well as localized design review policies in their respective municipal or county jurisdictions.

With the required application of localized shielding standards inland, and the enforcement of the strict, objective dark-sky protections of MM-AES-OBJ-6 in the coastal zone, the project's incremental contribution to regional light and glare would be minimized.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, and MM-AES-OBJ-6.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.1.7 Conclusion

Implementation of existing 2010 General Plan, LCP policies, County Code, and CIPs, along with MM-AES-OBJ-1, MM-AES-OBJ-2, MM-AES-CONS-3, MM-AES-OBJ-4, MM-AES-CONS-5, and MM-AES-OBJ-6, would reduce potential impacts related to scenic vistas, scenic highways, visual character and quality of public views, and light or glare to less than significant levels. However, the Model ODS has not yet been amended to include community- and place-specific objective design criteria, and until that time, it would be speculative to conclude that all development projects under the Objective Process would be fully mitigated through the Model ODS. Therefore, mitigated impacts relying on the Model ODS would remain significant and unavoidable. Furthermore, when considered together with state-mandated Regional Housing Needs Allocation units assigned to the AMBAG region, assuming complete mitigation across all cumulative project sites would be speculative, and the localized urban/rural interface conflict could occur. Therefore, aesthetic impacts would remain significant and unavoidable.



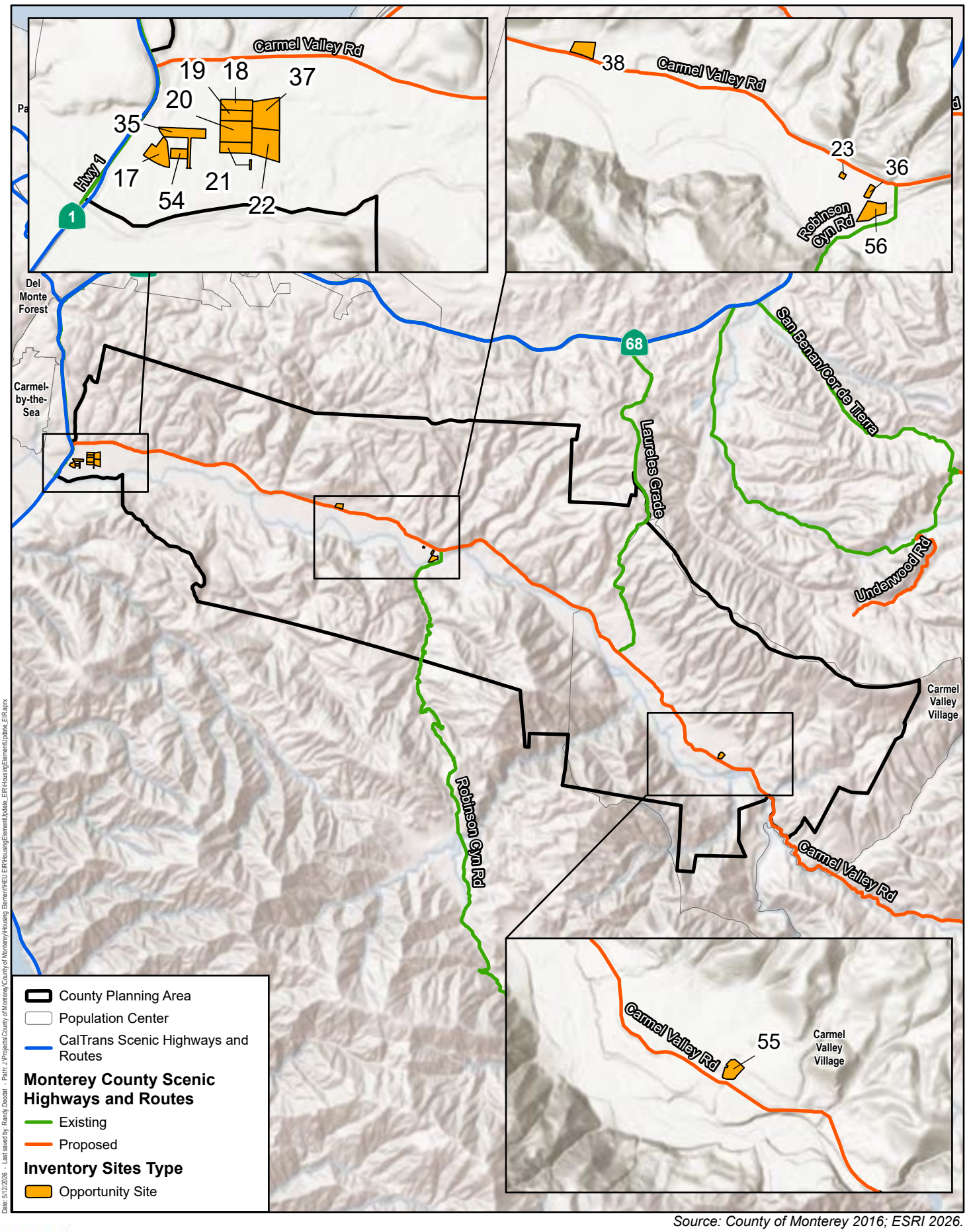

*Source: County of Monterey 2016; ESRI 2026.*

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**Figure 4.1-1a**

Scenic Highways and Routes in Carmel Area Land Use Plan

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Source: County of Monterey 2016; ESRI 2026.

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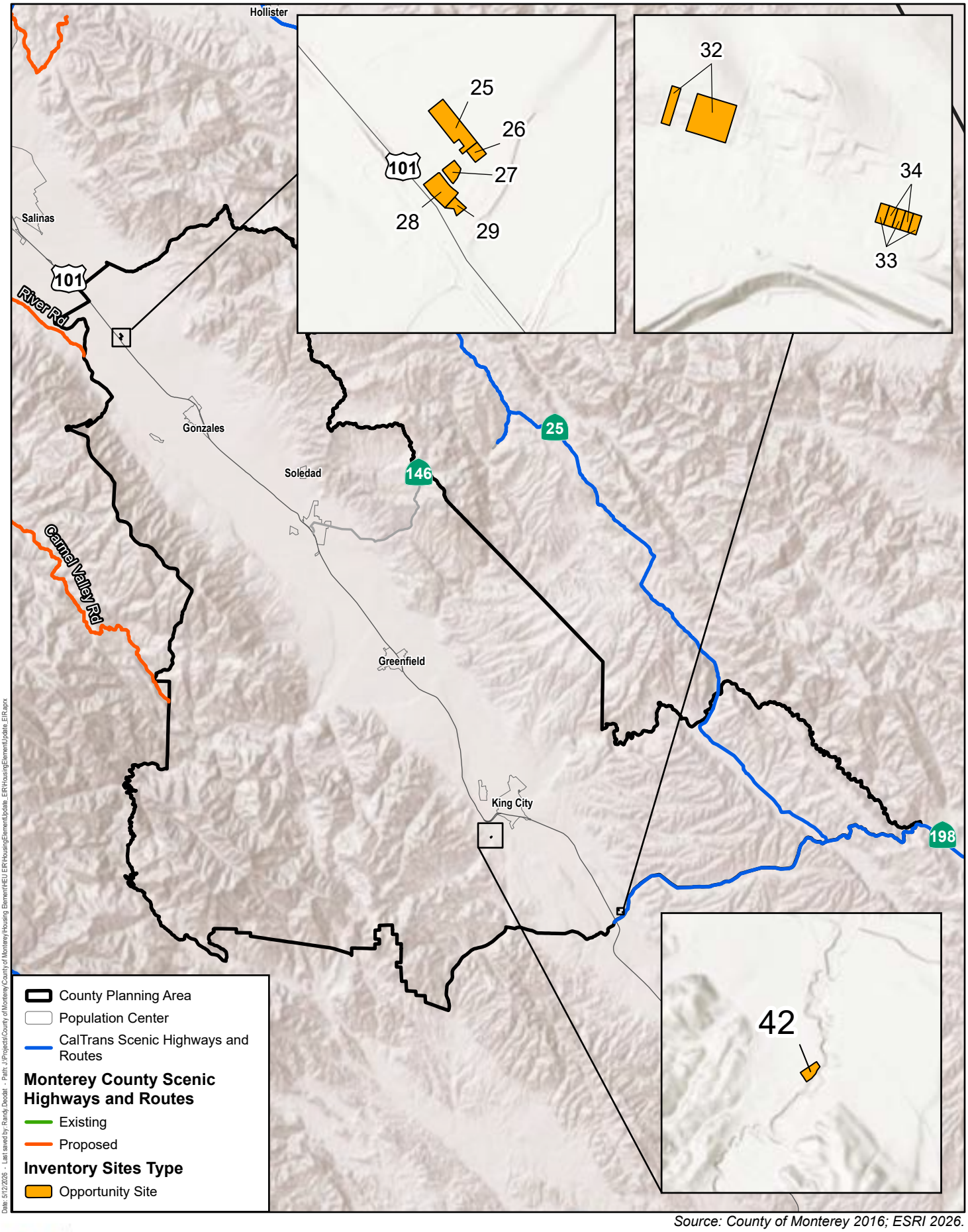
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**Figure 4.1-1b**

Scenic Highways and Routes in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

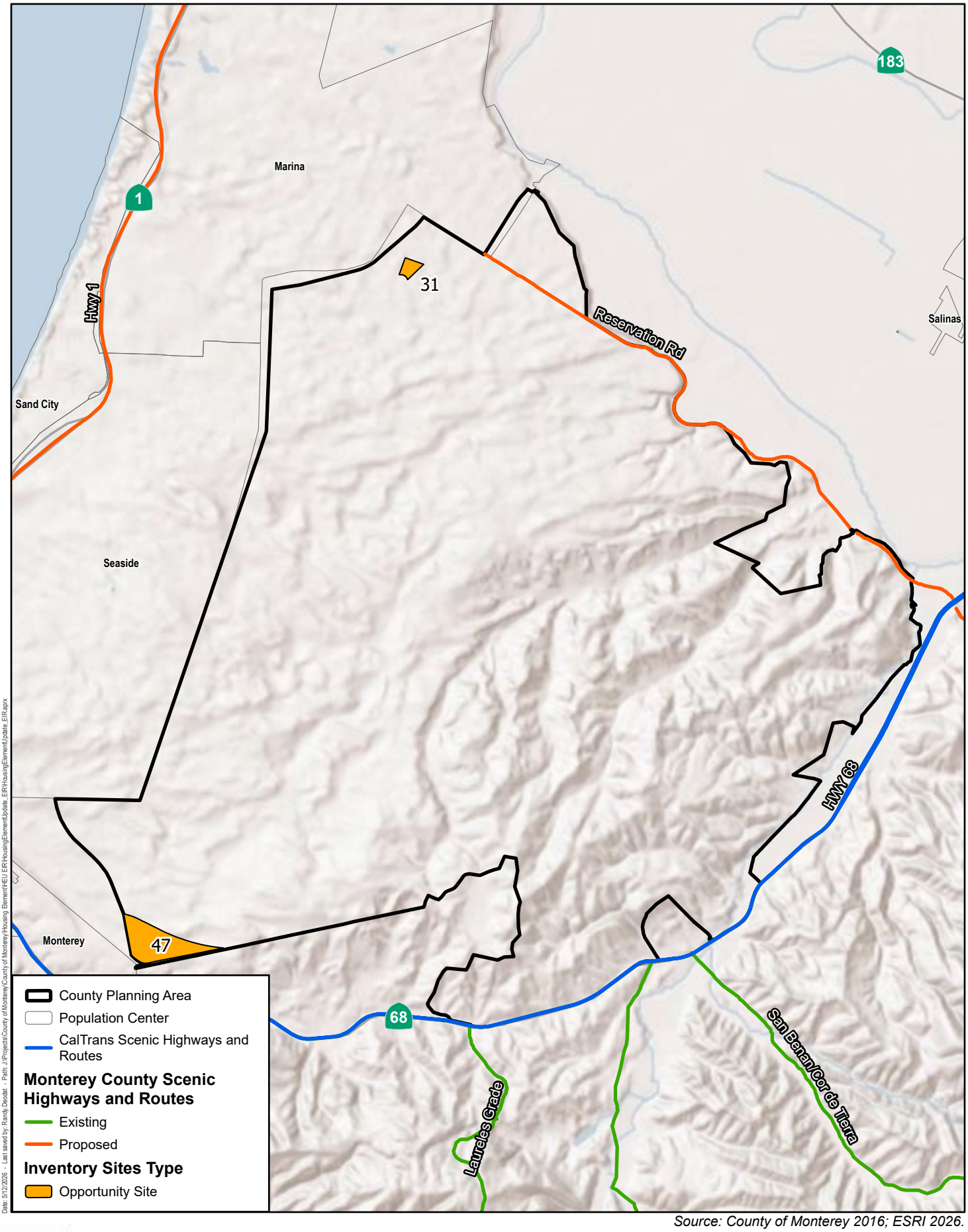
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**Figure 4.1-1c**

Scenic Highways and Routes in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

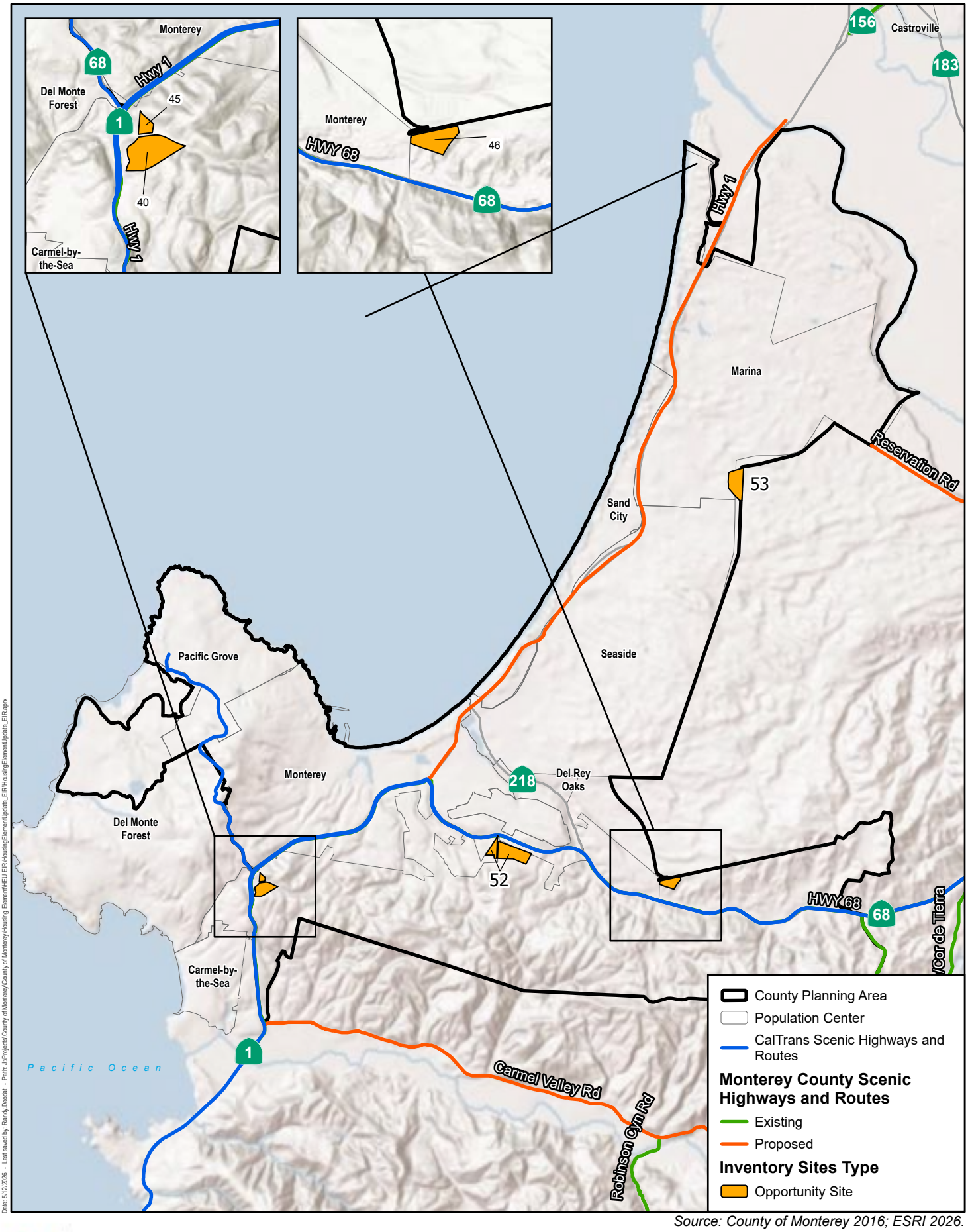
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**Figure 4.1-1d**

Scenic Highways and Routes in Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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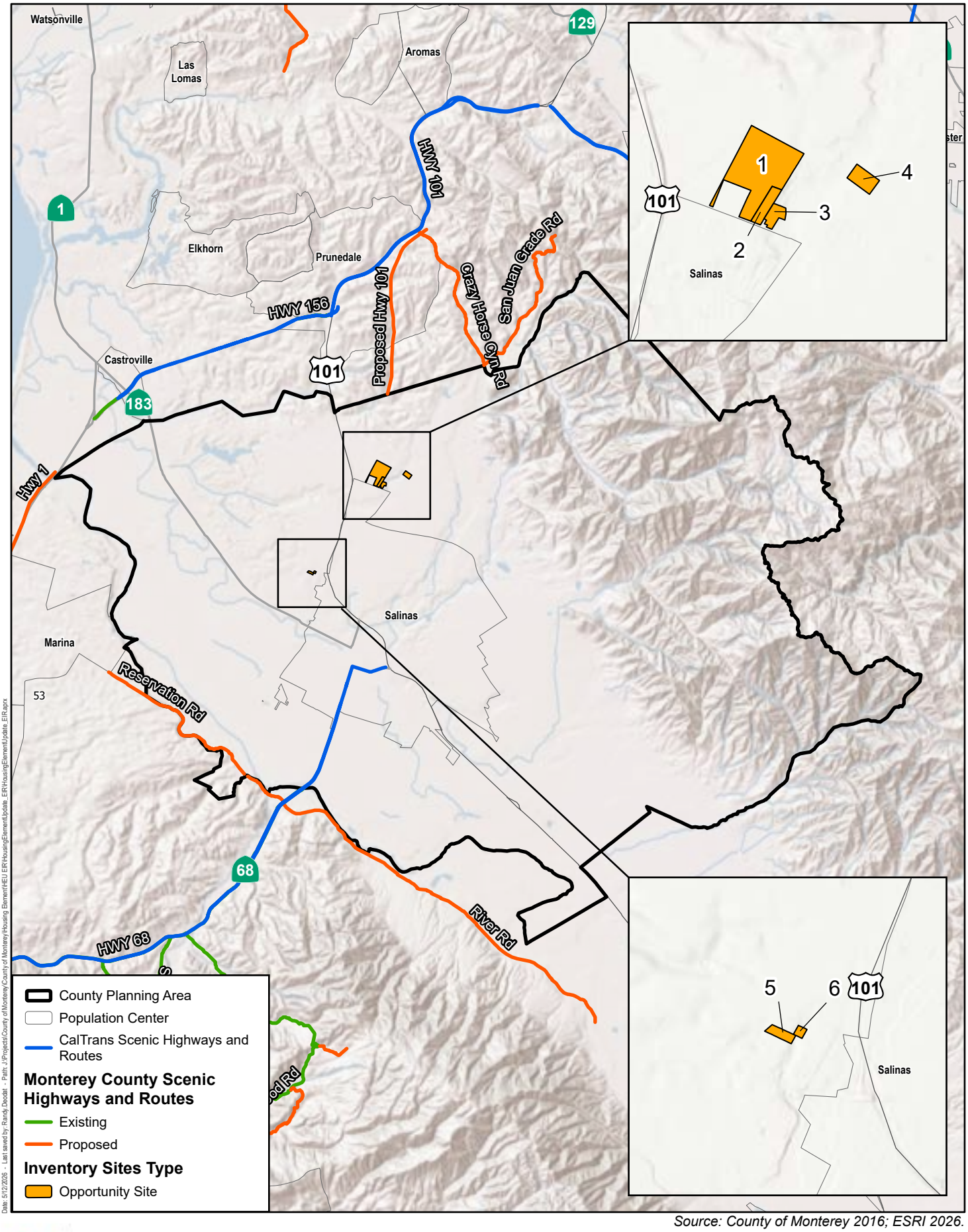
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**Figure 4.1-1e**

Scenic Highways and Routes in Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

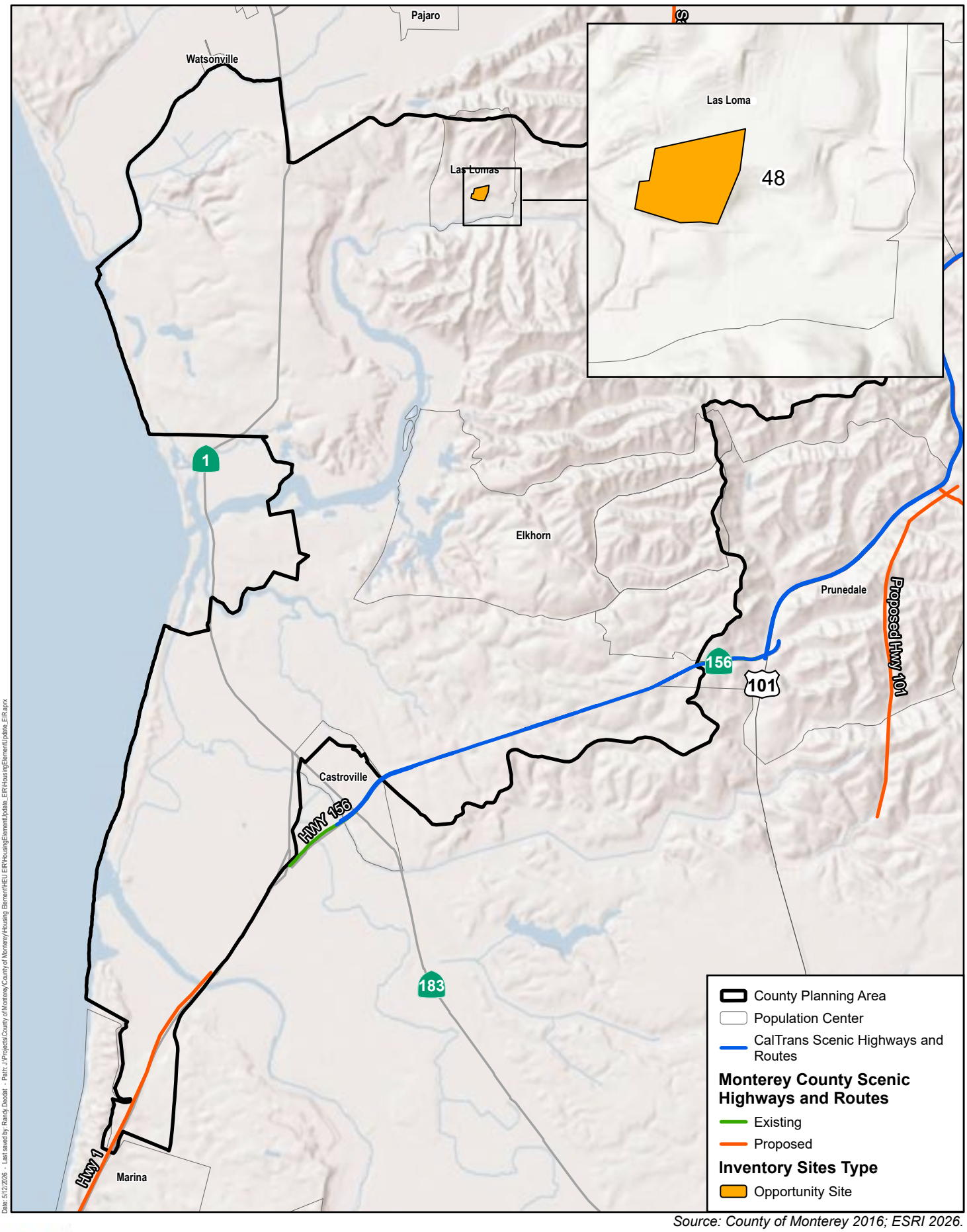
**Figure 4.1-1f**

Scenic Highways and Routes in Greater Salinas Area Plan



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Source: County of Monterey 2016; ESRI 2026.

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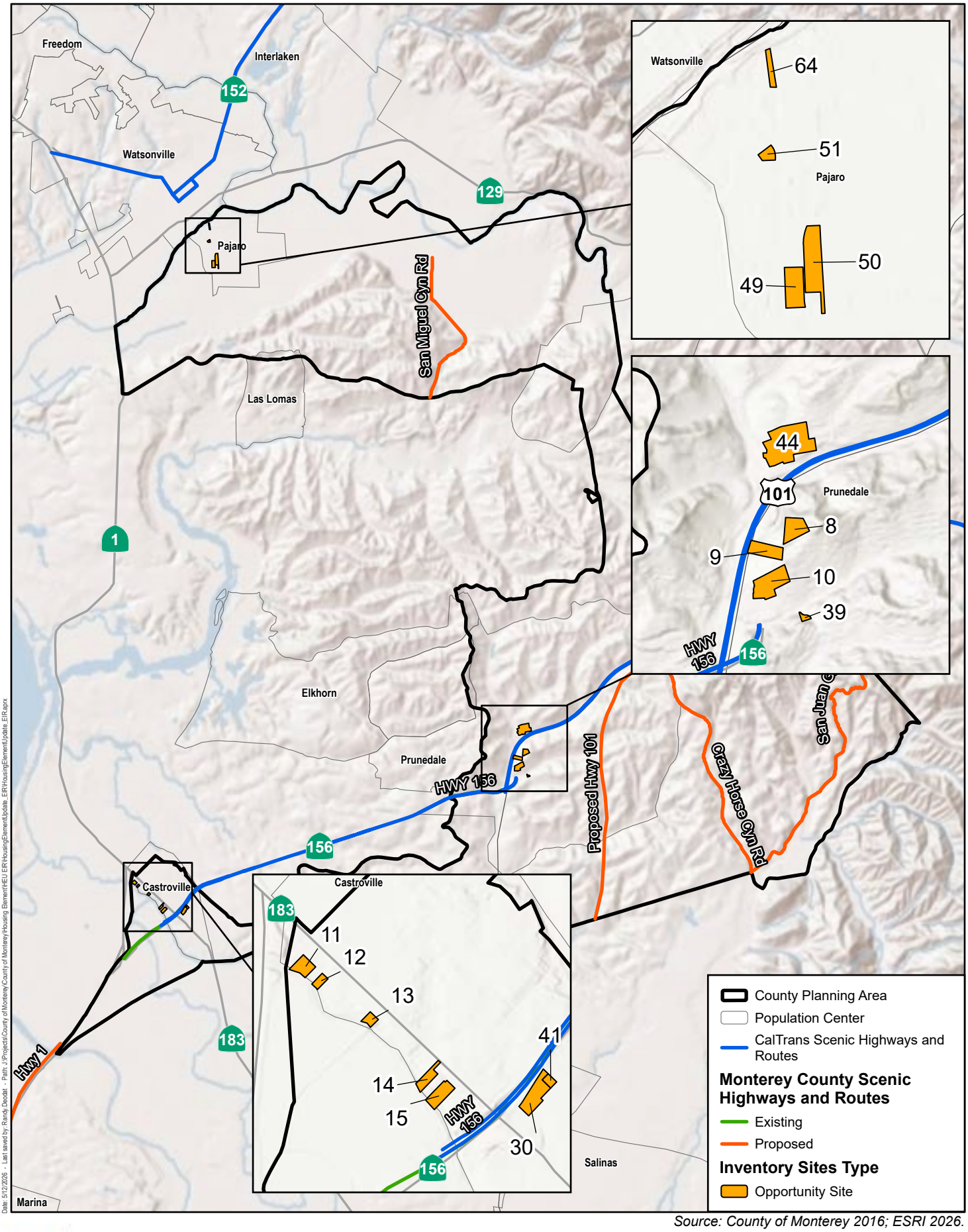
**Figure 4.1-1g**

Scenic Highways and Routes in North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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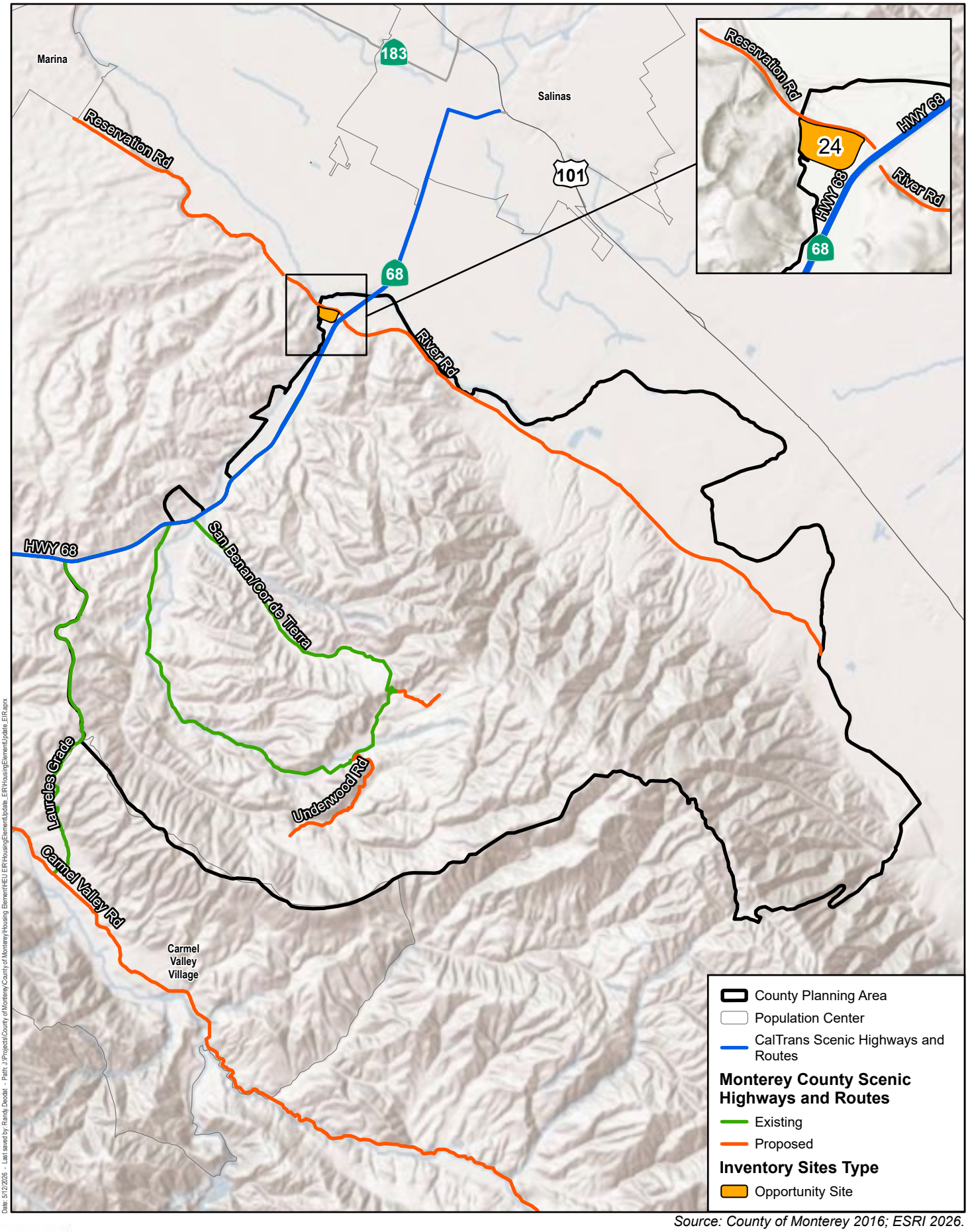
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**Figure 4.1-1h**

Scenic Highways and Routes in North County Inland Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; ESRI 2026.*

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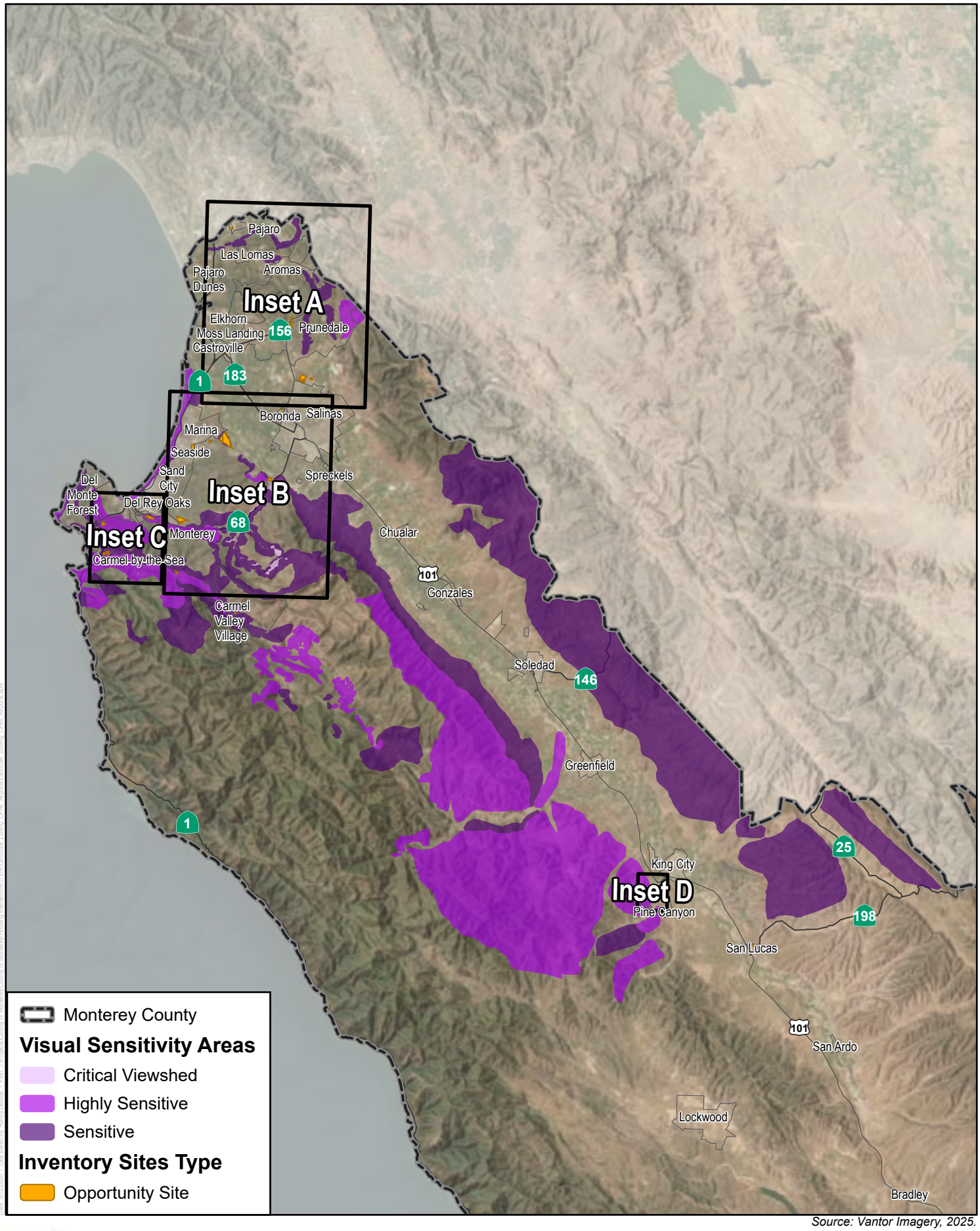
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**Figure 4.1-1i**

Scenic Highways and Routes in Toro Area Plan

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*Source: Vantor Imagery, 2025.*

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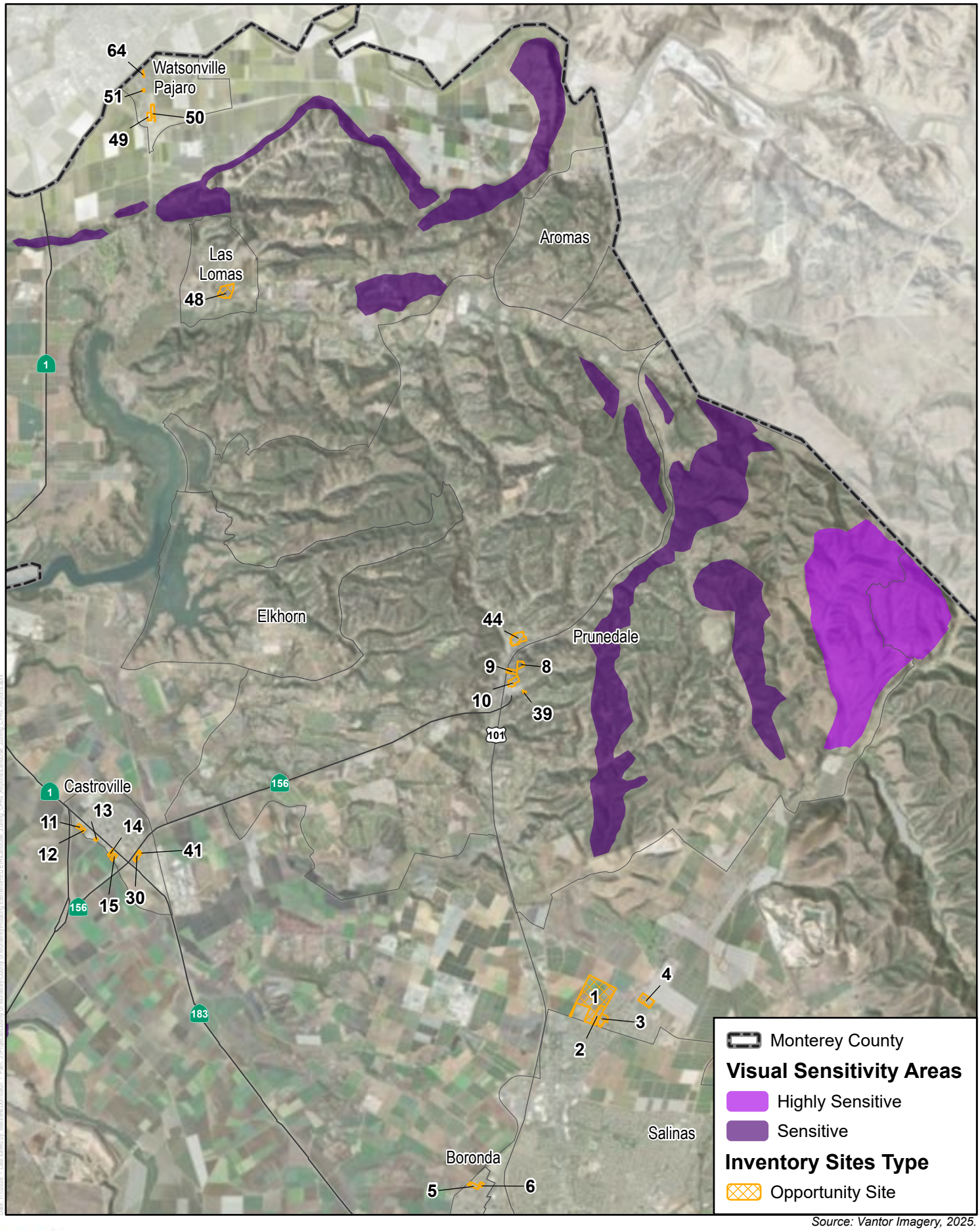
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**Figure 4.1-2**

Visual Sensitivity Areas

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*Source: Vantor Imagery, 2025.*

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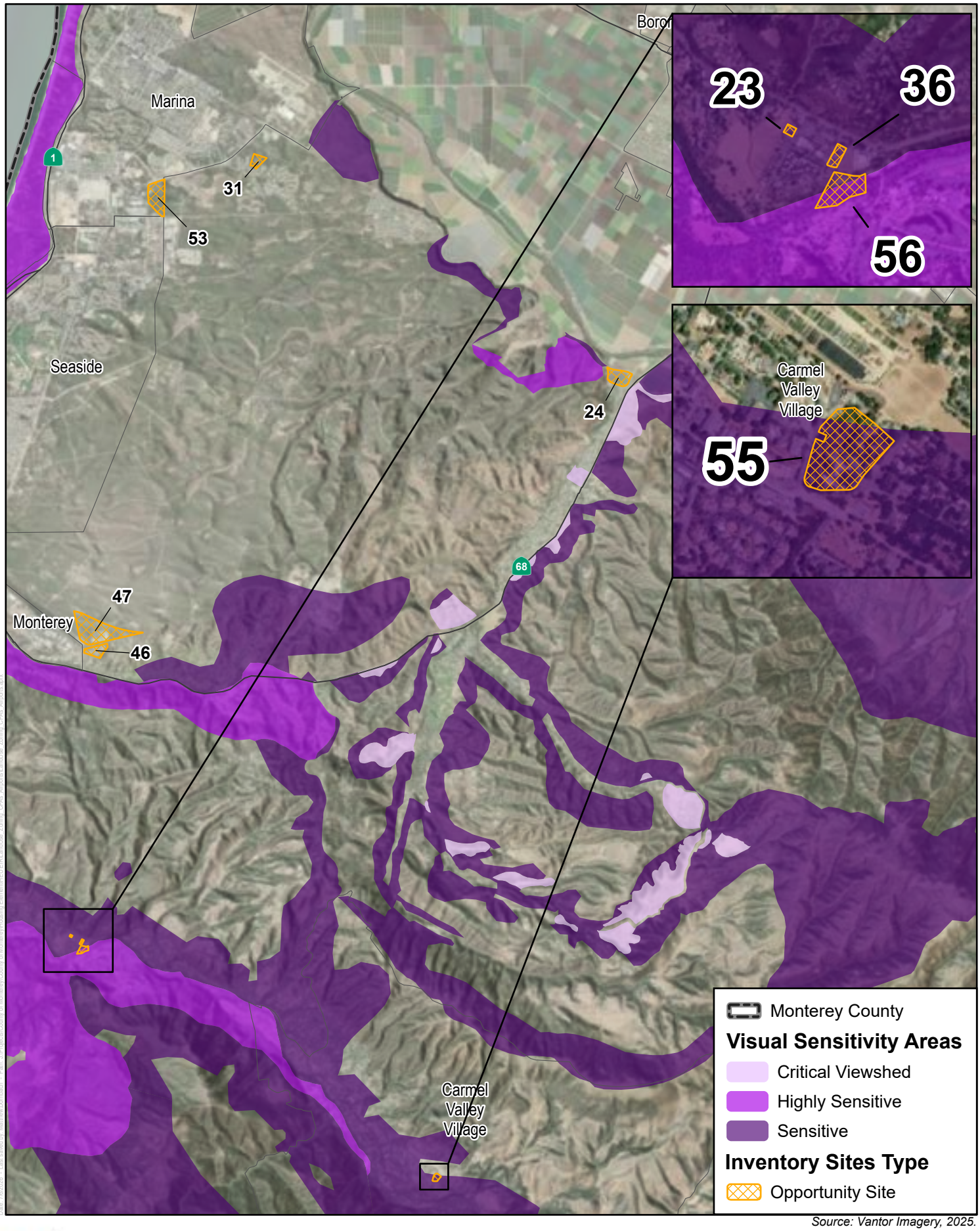
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**Figure 4.1-2a**

Visual Sensitivity Areas

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*Source: Vantor Imagery, 2025.*

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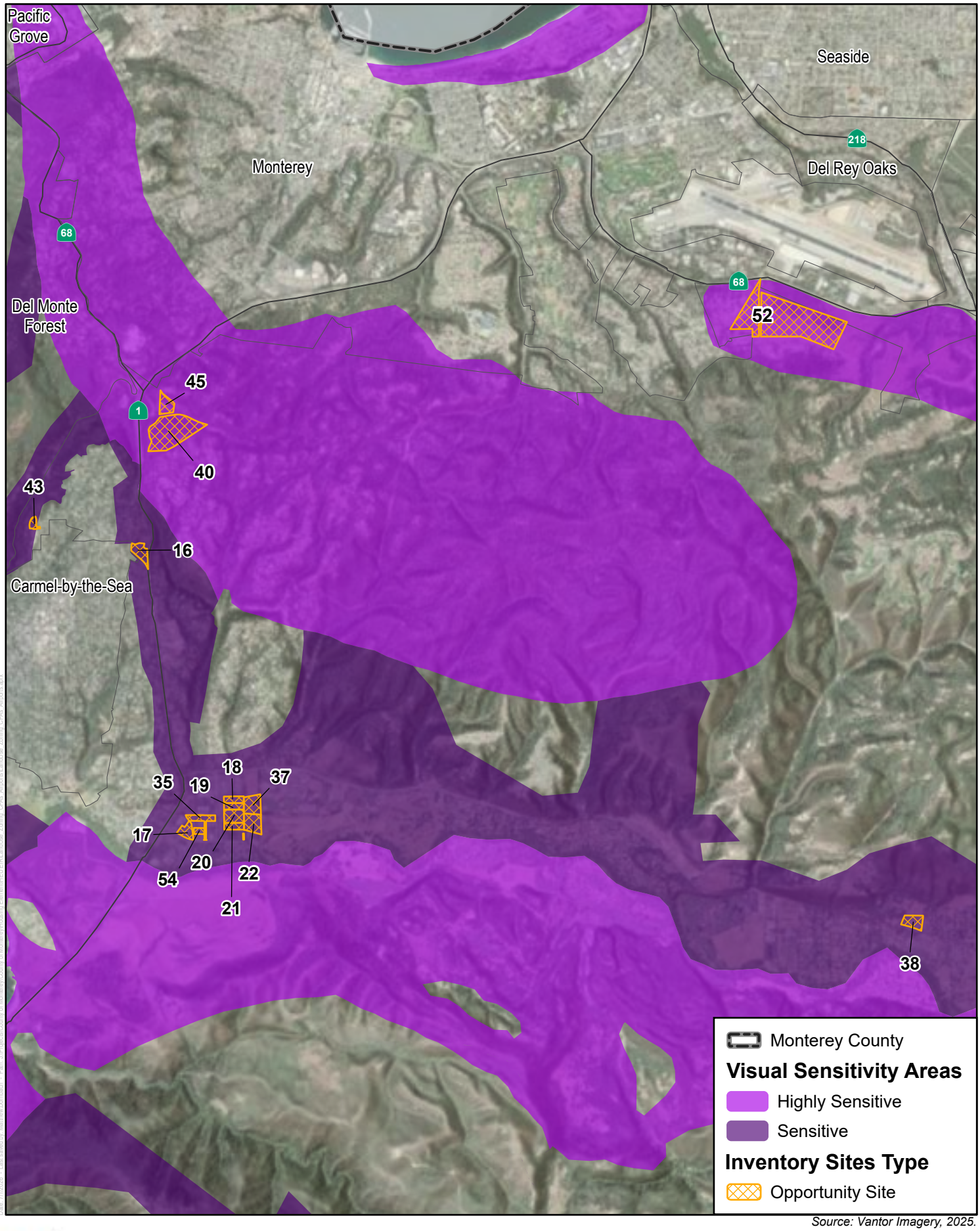
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**Figure 4.1-2b**

Visual Sensitivity Areas

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*Source: Vantor Imagery, 2025.*

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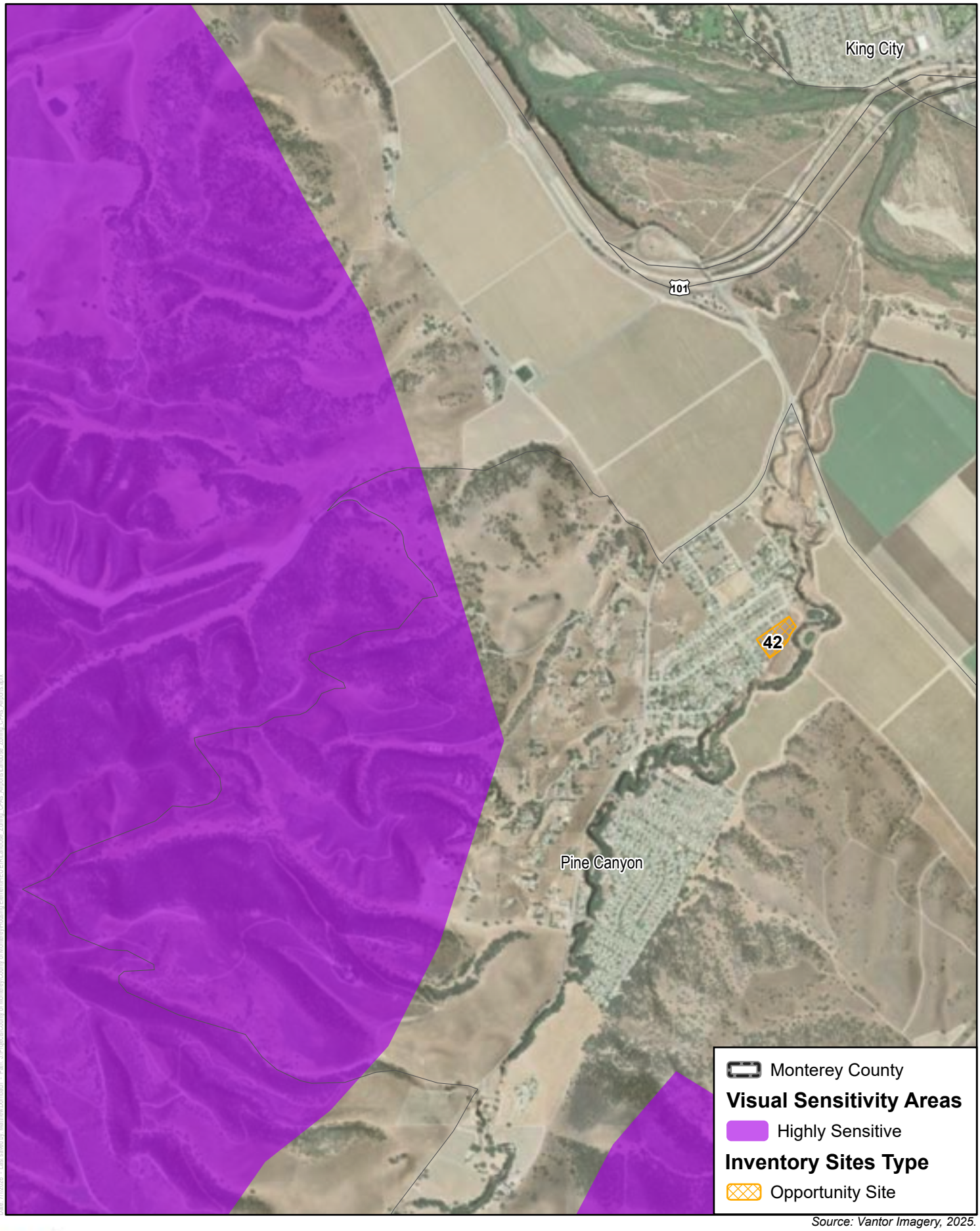
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**Figure 4.1-2c**

Visual Sensitivity Areas

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*Source: Vantor Imagery, 2025.*

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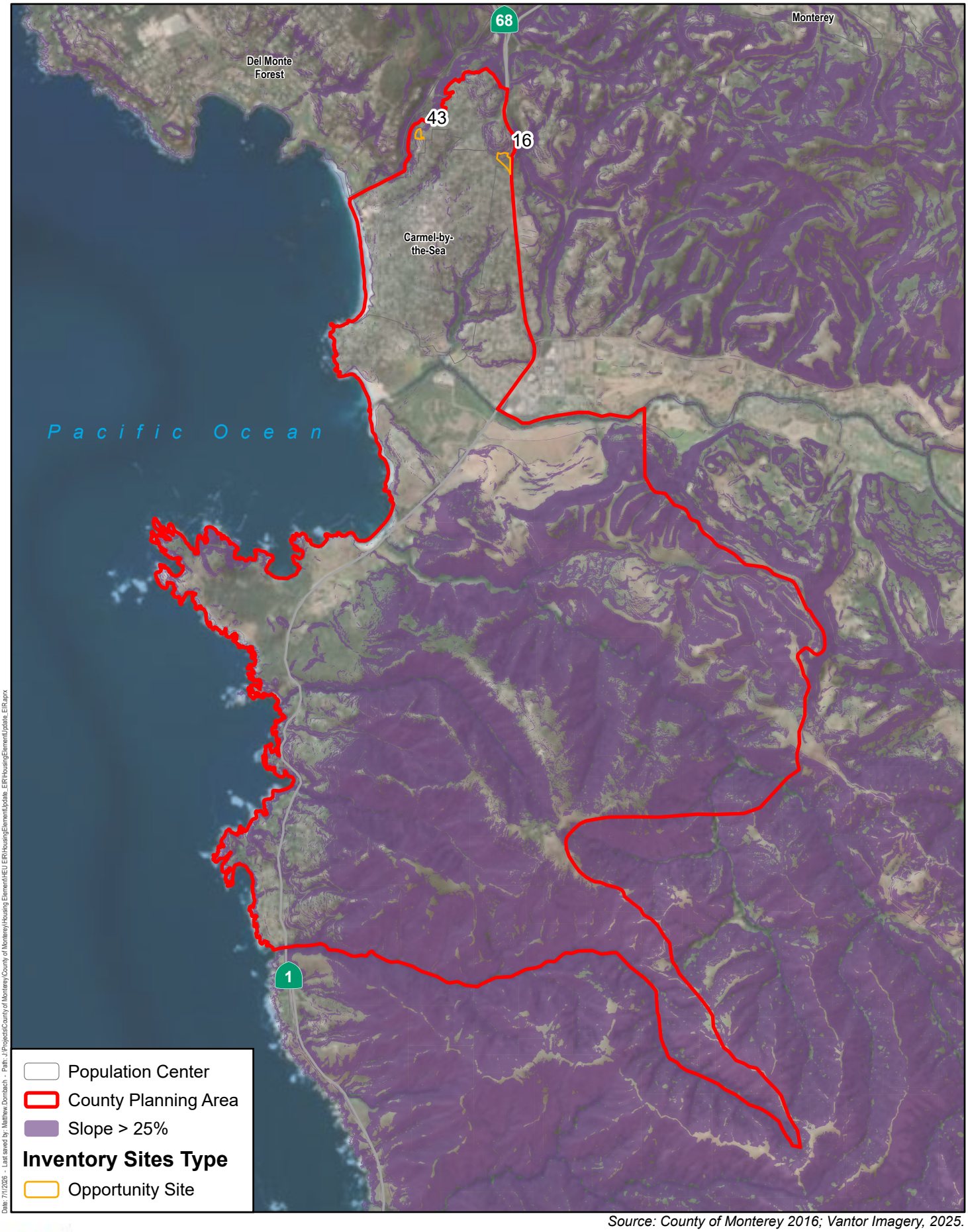
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**Figure 4.1-2d**

Visual Sensitivity Areas

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

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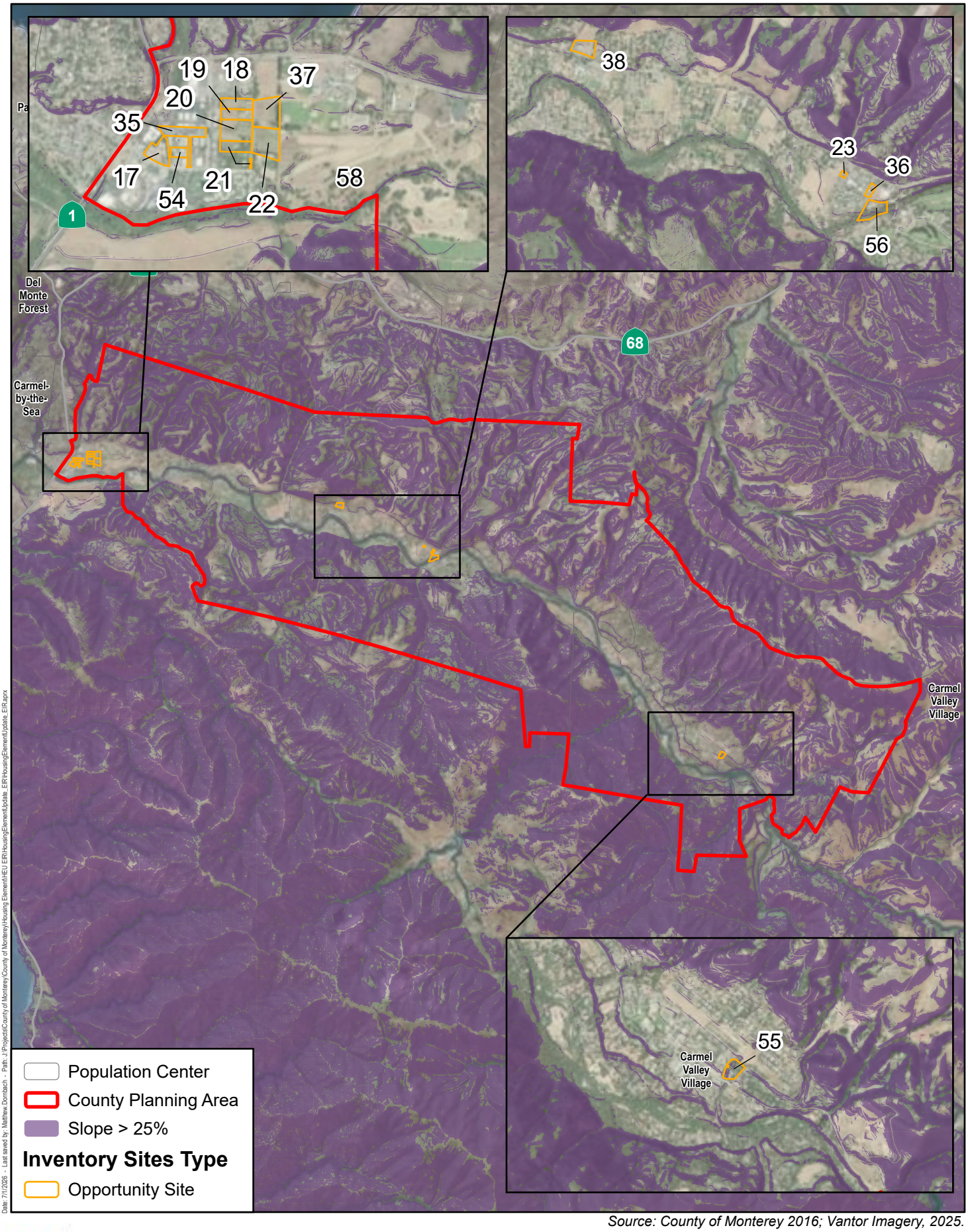
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**Figure 4.1-3a**

Areas with Slopes of 25% or Greater in the Carmel Area Land Use Plan

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

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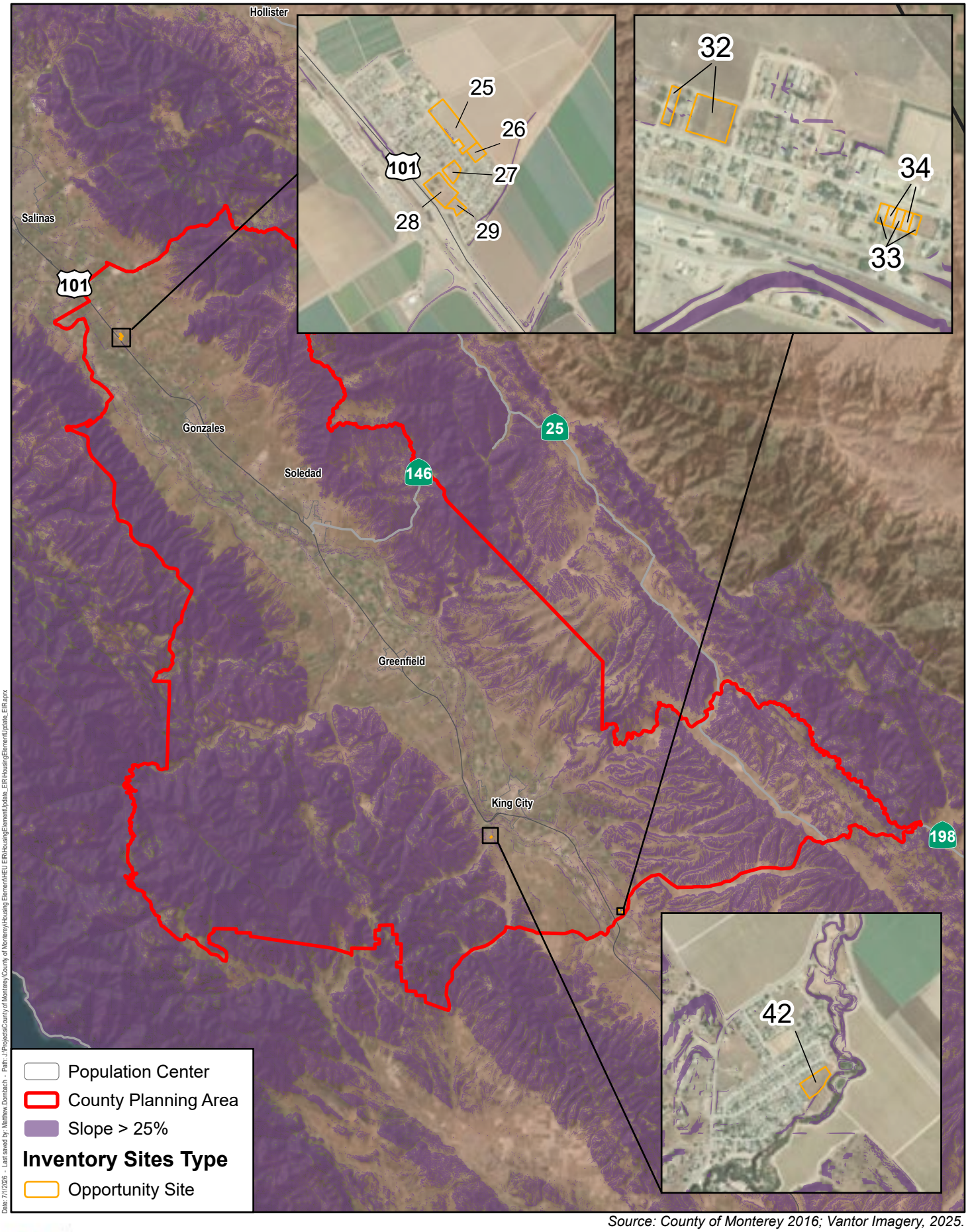
**Figure 4.1-3b**

Areas with Slopes of 25% or Greater in the Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

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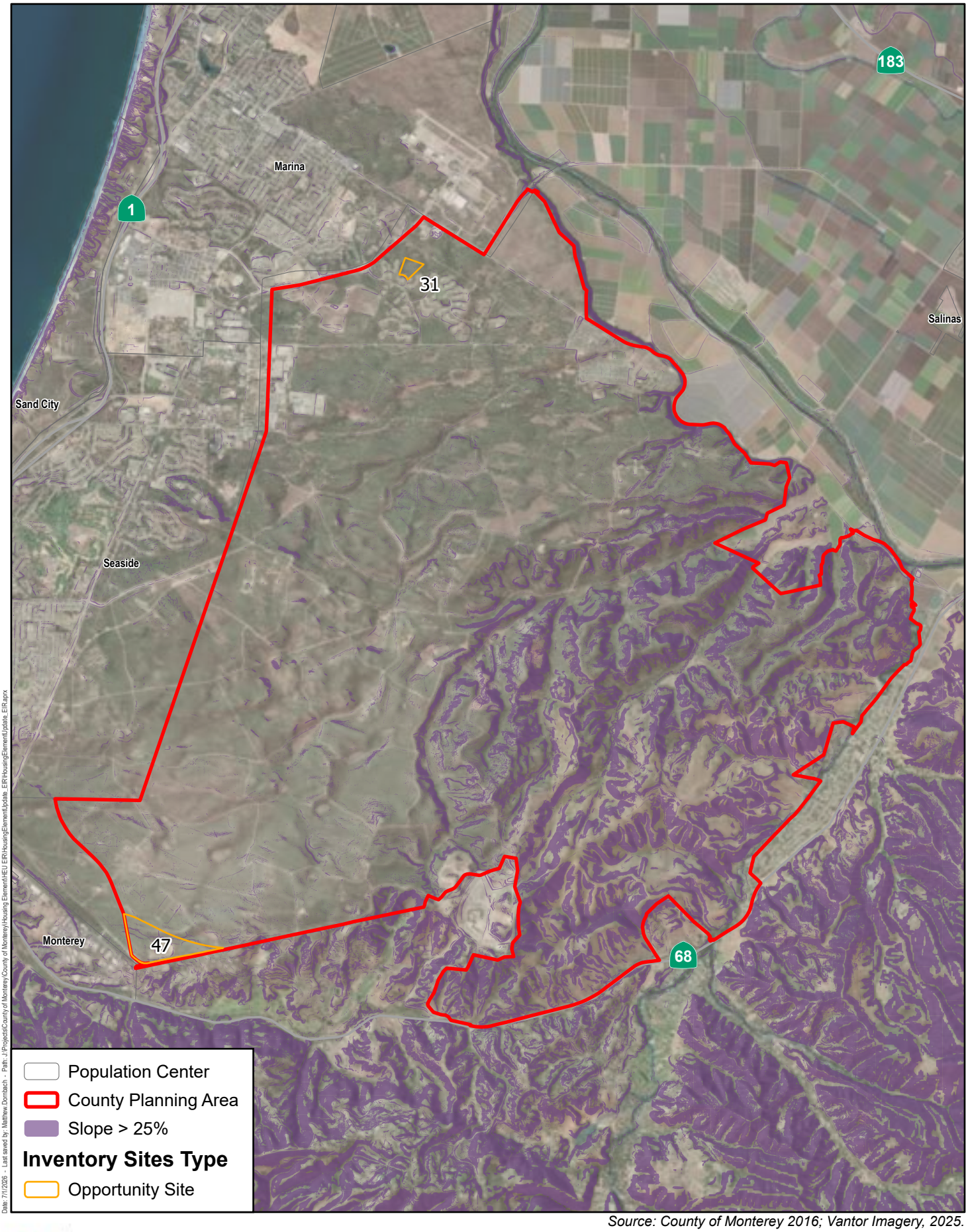
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**Figure 4.1-3c**

Areas with Slopes of 25% or Greater in the Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

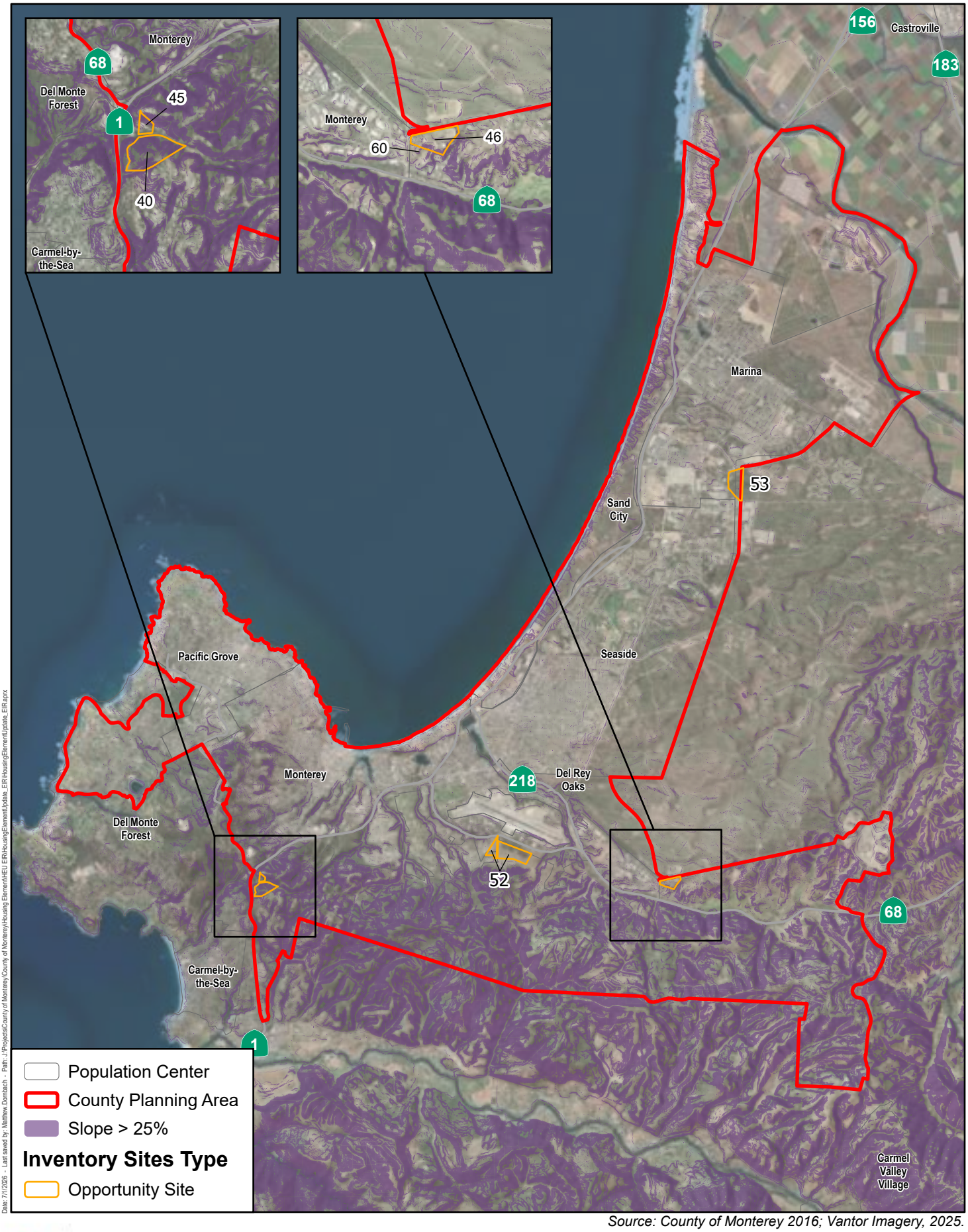
Harris & Associates

**Figure 4.1-3d**

Areas with Slopes of 25% or Greater in the Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: County of Monterey 2016; Vantor Imagery, 2025.

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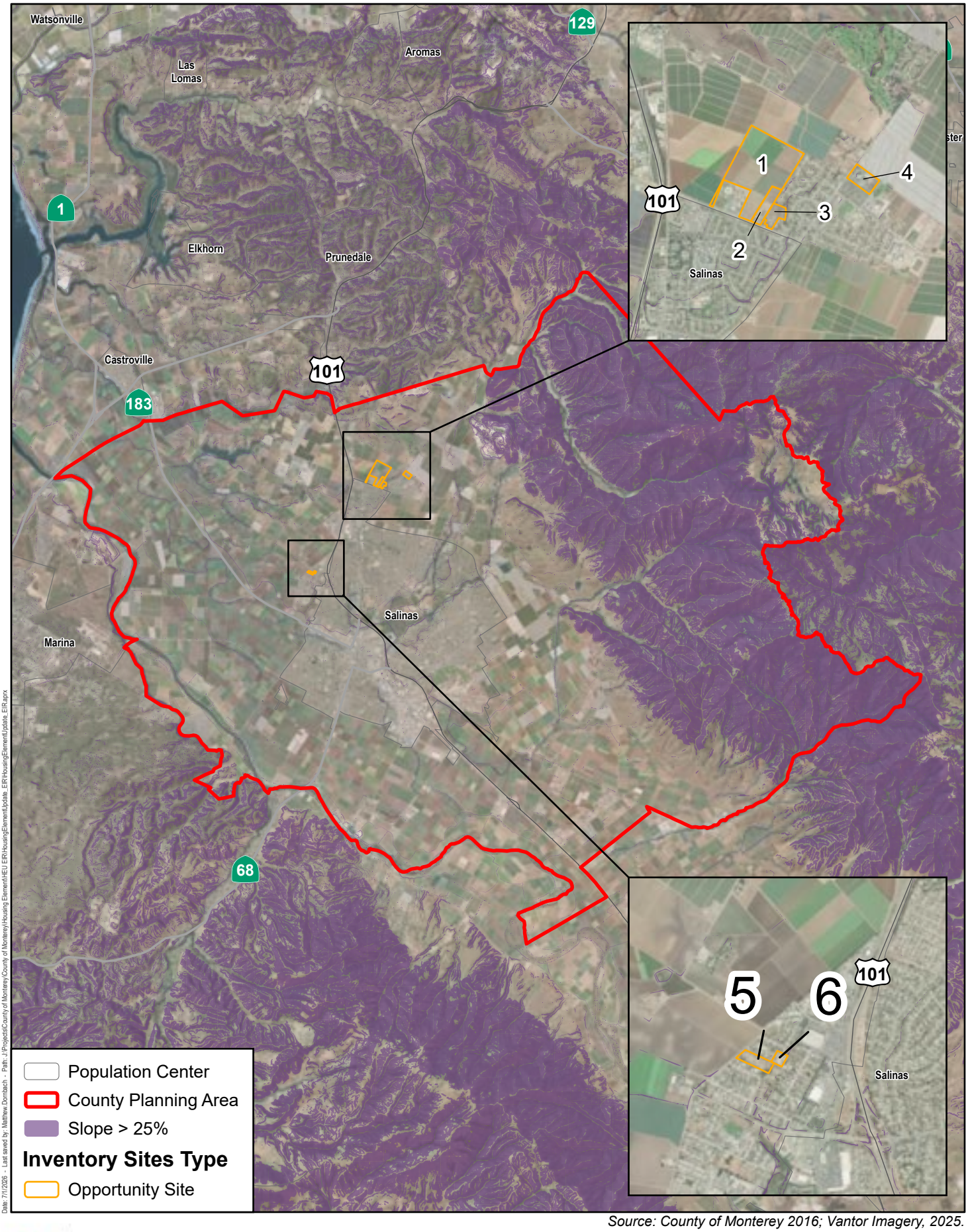
**Figure 4.1-3e**

Areas with Slopes of 25% or Greater in the Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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**Figure 4.1-3f**

Areas with Slopes of 25% or Greater in the Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

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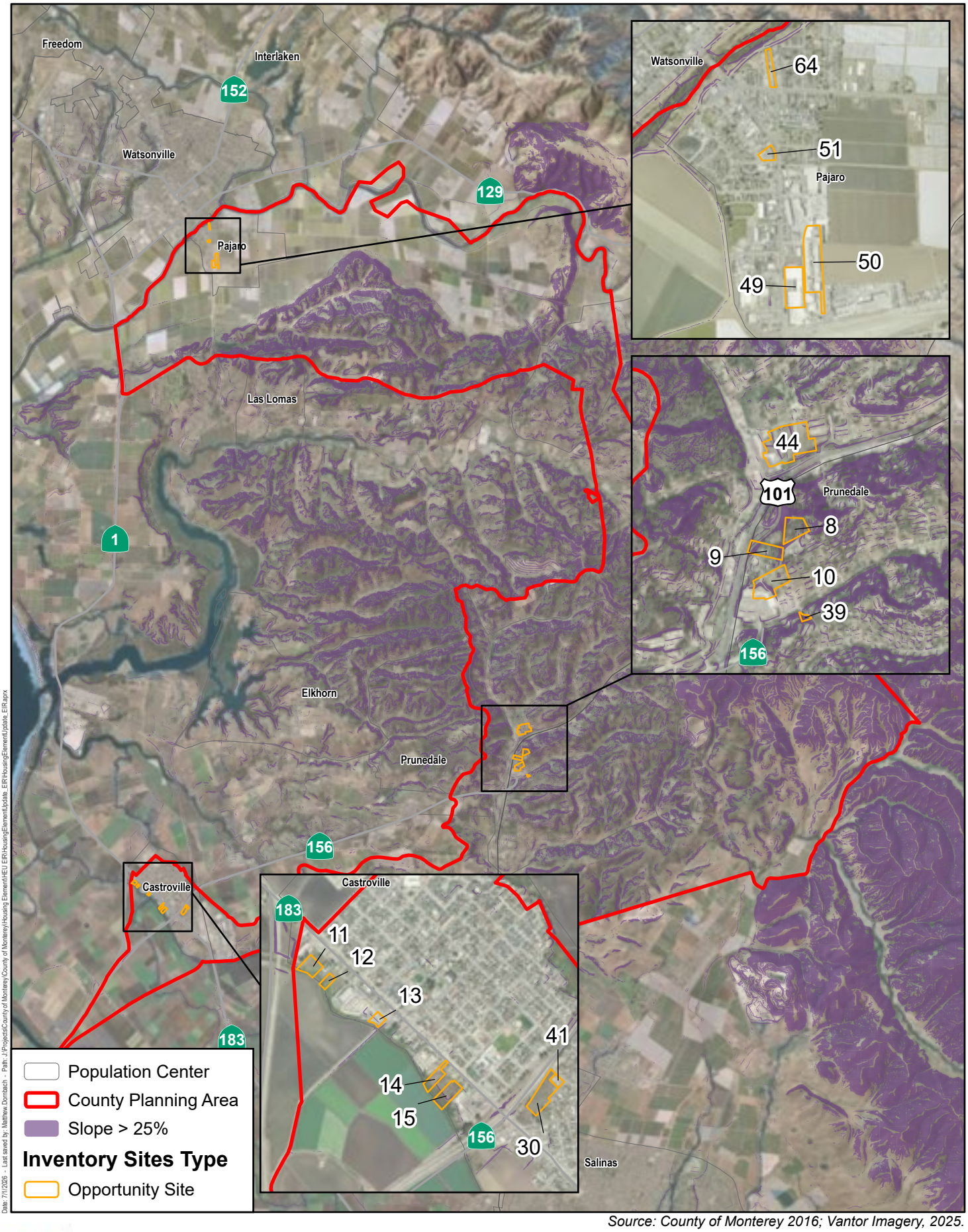
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**Figure 4.1-3g**

Areas with Slopes of 25% or Greater in the North County Land Use Plan (Coastal)

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Source: County of Monterey 2016; Vantor Imagery, 2025.

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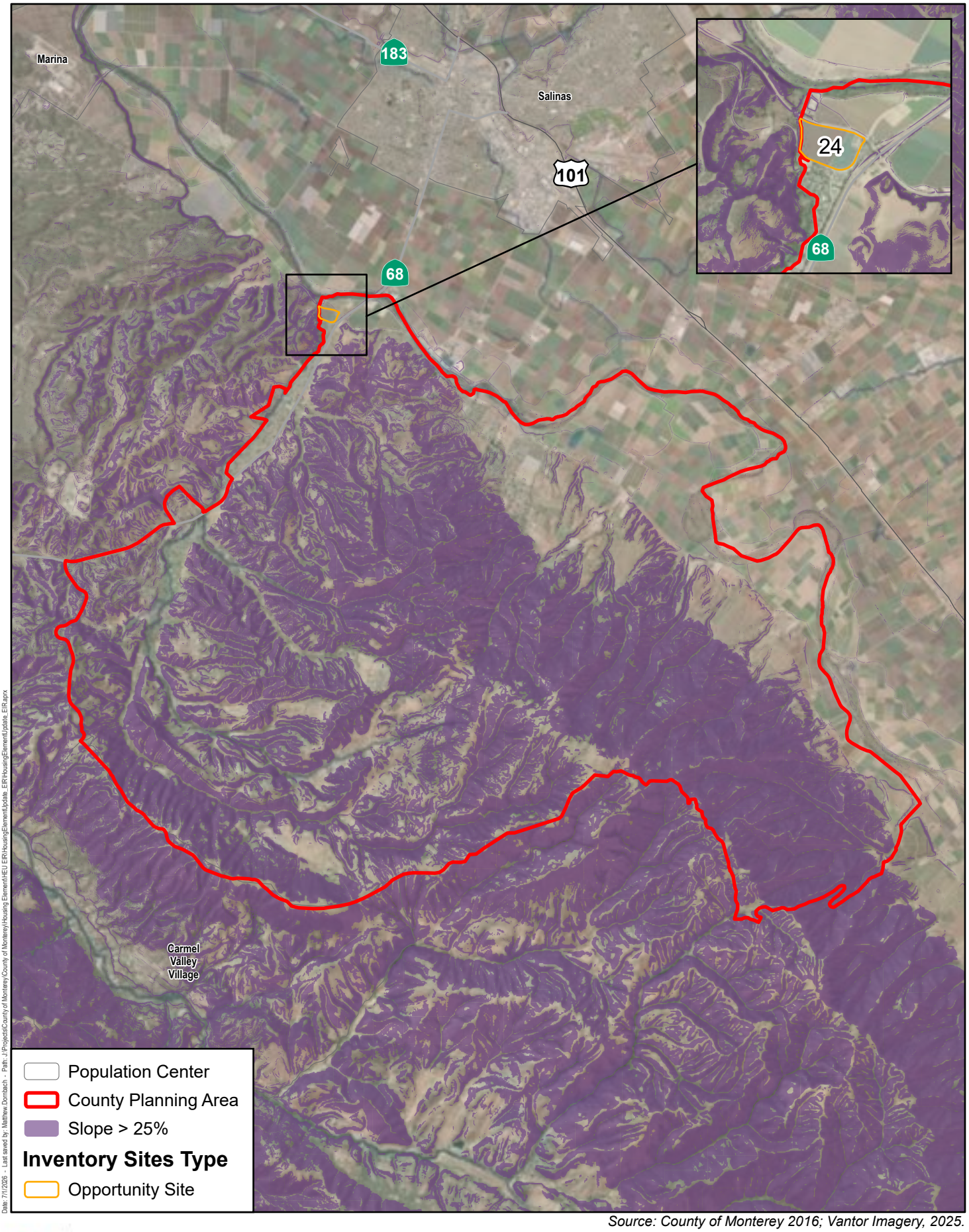
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**Figure 4.1-3h**

Areas with Slopes of 25% or Greater in the North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey 2016; Vantor Imagery, 2025.*

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**Figure 4.1-3i**

Areas with Slopes of 25% or Greater in the Toro Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# 4.2 Agriculture and Forestry Resources

This section evaluates the potential for impacts related to agriculture and forestry resources resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts to agriculture and forestry resources, particularly from conversion to residential uses due to implementation of HEU6.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.2.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address agriculture and forestry resources.

### 4.2.1.1 Federal

#### Farmland Protection Policy Act (Public Law 97–98, Sections 1539–1549)

The Farmland Protection Policy Act is intended to minimize the impact of federal programs on unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that—to the extent possible—federal programs are administered to be compatible with state and local units of government and private programs and policies to protect farmland. The act is overseen by the U.S. Department of Agriculture's Natural Resources Conservation Service.

#### 4.2.1.2 State

### California Land Conservation Act (Williamson Act) (California Government Code, Section 51200 et seq.)

The California Land Conservation Act of 1965, better known as the "Williamson Act," conserves agricultural and open space lands through property tax incentives and voluntary restrictive land use contracts administered by local governments under state regulations. Private landowners voluntarily restrict their land to agricultural and compatible open space uses under minimum 10-year rolling term contracts, with counties and cities also acting voluntarily. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use rather than potential market value. Nonrenewal status is applied to Williamson Act Contracts that are within the 9-year termination process, during which the annual tax assessment for the property gradually increases.

### Farming Mapping and Monitoring Program

The California Natural Resources Agency is charged with restoring, protecting, and maintaining the state's natural, cultural, and historical resources. Within it, the California Department of Conservation (DOC) provides technical services and information to promote informed land use decisions and sound management of the state's natural resources. The DOC manages the Farming Mapping and Monitoring Program (FMMP), which supports agriculture throughout California by developing maps and statistical data for analyzing land use impacts to farmland. Every 2 years, the FMMP publishes a field report for each county in the state.

### California Coastal Act

The California Coastal Act mandates strong protection for agricultural lands, requiring that the maximum amount of prime agricultural land be maintained in production and limiting the conversion of agricultural land to non-agricultural uses. It mandates stable urban-rural boundaries, discourages parcel fragmentation, and requires that adjacent development not interfere with agricultural viability. Section 30241 of the California Coastal Act (California Public Resources Code [PRC], Section 30241) mandates that the maximum amount of prime agricultural land be maintained in production to protect the coastal agricultural economy. It requires establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses and limiting agricultural land conversion around the periphery of urban areas except where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development. Where the viability of existing agricultural use is determined to be severely limited by conflicts with urban uses, Section 30241.5 requires consideration of an economic feasibility evaluation that determines the viability of existing agricultural uses.

Section 30242 of the California Coastal Act (PRC Section 30242) limits the conversion of non-prime lands suitable for agriculture unless continued or renewed agricultural use is not feasible, or such conversion would preserve prime agricultural land or concentrate development to prevent urban sprawl consistent with Section 30250. Section 30243 mandates protection of the long-term productivity of soils and timberlands. Section 30250 mandates that new residential, commercial, or industrial development be concentrated in or adjacent to existing developed areas with adequate services. It restricts development in rural areas to prevent urban sprawl, ensuring projects do not cause significant individual or cumulative adverse impacts on coastal resources.

Local governments in the coastal zone are responsible for creating Local Coastal Plans that implement these state policies.

### Forest Land and Timberland Resources

PRC Section 12220(g), defines "forest land" as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

PRC Section 4526, defines "timberland" as land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

California Government Code, Section 51104(g), defines "Timberland production zone" as an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

#### 4.2.1.3 Local

### 2010 General Plan (Inland)

#### *Land Use Element*

The Monterey County General Plan (2010 General Plan) Land Use Element includes policies to limit development in agricultural areas and facilitate agricultural buffers/conservation easements to protect and conserve existing agricultural operations (Policies LU-1.8, LU-2.8, and LU-2.9). The Element also establishes land use designations for the County's agricultural lands (Goal LU-3 and Policies LU-3.1 and LU-3.2). Additionally, the Element promotes clustering of growth and development, particularly residential uses, in areas most suitable for development and where appropriate infrastructure exists to support that development (Goal LU-1 and Policies LU-1.1, LU-1.2, LU-1.4, LU-1.5, LU-1.8, and LU-1.9).

### *Agriculture Element*

The 2010 General Plan Agriculture Element Policies AG-1.1 through AG-1.12 promote the long-term protection, conservation, and enhancement of productive and potentially productive agricultural land. In particular, Policy AG-1.2 requires agricultural buffers as partial mitigation for new non-agricultural development adjacent to farmland designated as Prime, of Statewide Importance, Unique, or of Local Importance. Policy AG-1.3 prohibits subdivision of Important Farmland with some exceptions, including where the division would create housing to support the agricultural industry including for farmworkers, employees, or their families. Policy AG-1.12 calls for the County to implement a program requiring mitigation for the loss of Important Farmland on an individual project basis.

### *Conservation and Open Space Element*

Policies OS-1.7 and OS-1.8 encourage clustering development in rural and agricultural areas and avoiding development in areas with natural habitat and prime agricultural soils to protect prime agricultural land, visual resources, and critical habitat. Policy OS-10.3 promotes conservation of naturally vegetated and forested areas for their air purifying functions. Policy OS-5.23 supports a County mitigation program for the loss of oak woodlands while also taking into consideration wildfire prevention and protection**.**

## Area and Master Plans

In addition to the above 2010 General Plan goals and policies, the following Area and Master Plans have supplemental policies related to agriculture and forestry resources:

### *Agricultural and Winery Corridor Plan*

The Agricultural and Winery Corridor Plan establishes guidelines and standards for development of wineries and wine industry-related uses in the designated corridor. Guidelines include, but are not limited to:

- Wineries and related uses within existing agricultural operations.
- Projected number of artisan and full-scale wineries allowed within the next 20 years.
- Criteria for creating a limited number of 5-acre or larger sized lots for artisan wineries.
- Criteria for adding winery tasting facilities to existing wineries.
- Number of new stand-alone winery tasting facilities allowed within the next 20 years.
- Type of auxiliary structures and uses allowed within the next 20 years.
- Design Guidelines that encourage unique expressions of architecture while maintaining the rural character of the area.
- Infrastructure financing that addresses industry-related impacts on the corridor over the life of the plan.

### *South County Area Plan*

Policy SC-1.2 of the South County Area Plan encourages clustered development in all areas where development is permitted to make the most efficient use of land and to preserve agricultural land and open space.

### *Carmel Valley Master Plan*

Policies CV-6.1 through CV-6.3 of the Carmel Valley Master Plan support the protection and productivity of agricultural lands in the planning area. In particular, Policy CV-6.3 requires that croplands and orchards be retained for agricultural use, and if the parcel cannot be developed because of this policy, it only allows a low-density clustered residential development on one-third of the property or less.

## Community Plans

### *Castroville Community Plan*

Agricultural Conservation/Buffer Designation: Ensuring that existing agricultural operations around the community of Castroville can continue is an important goal of the Community Plan. Residential uses proposed adjacent to agricultural uses must therefore be designed in such a way as to limit conflicts. Issues such as noise, dust, and chemical application can potentially impact residential neighborhoods, while the introduction of urban uses can impact and encroach upon the viability of agricultural operations. To address these issues, resource/agricultural conservation buffers are included to separate new residential land uses from existing agricultural operations. Areas designated as Resource Conservation (RC-C) are generally located along the Merritt Street Corridor. This designation essentially creates a separation of 200 feet between the uses, which is consistent with Sections 21.66.030.F and 20.144.080.D of the Zoning Code. Fences, walls, landscaping, roadways, parking, and trail systems are all allowed to be in this designation.

Agricultural/open space buffers of at least 200 feet wide are required along subarea boundaries throughout the Castroville Community Plan Area when there is abutment to agricultural operations or the Tembladero Slough.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan*

Key Policy 2.6.1, General Policies 2.6.2, and Specific Policies 2.6.3 of the North County Land Use Plan support the permanent preservation of prime agricultural soils exclusively for agricultural use, protect productive farmland, and encourage development adjacent to prime and productive farmland that is compatible with agriculture. For instance, Specific Policies 2.6.3 limits development of Agriculture Preservation lands to accessory buildings, including farm residences, agriculture-related facilities, and very low-density residential use at a density of one unit per 40

acres that shall be, where possible, on the least agriculturally viable area of the parcel. Conversion of Agricultural Conservation lands to non-agricultural uses is permitted only if it is necessary to establish a stable boundary between agriculture and adjacent urban uses or sensitive habitats, or accommodate agriculture-related or other permitted uses that would economically enable the continuation of farming on the parcel and adjacent lands. A buffer (open space easement) shall be established to protect agriculture from impacts of new residential or other incompatible development adjacent to agricultural areas.

#### *Carmel Area Land Use Plan*

Key Policy 2.6.2, General Policies 2.6.3, and Specific Policies 2.6.4 of the Carmel Area Land Use Plan support the preservation of prime agricultural land for agricultural use and encourage ranching activities and development adjacent to prime farmland that is compatible with the continued agricultural use of the land. In particular, General Policies 2.6.3 permit only agricultural uses on prime agricultural lands as defined by General Policies 2.6.3.1.a and b and generally discourage subdivision of large ranching properties. Specific Policies 2.6.4 encourage agricultural buffers to protect agriculture from potential impacts of adjacent development and to mitigate against the effects of agricultural operations on adjacent land uses.

Key Policy 2.5.2, General Policies 2.5.3, and Specific Policies 2.5.4 support the protection and conservation of forested land in the Carmel area, particularly old-growth redwood. General Policies 2.5.3 encourage the restoration of native forest resources, removal of non-native tree species, and management of timber in environmentally sensitive habitat areas.

### Monterey County Code

#### *Title 21 – Zoning (Inland)*

##### Section 21.66.030 – Standards for Agricultural Uses

Section 21.66.030 of the Zoning Ordinance provides development standards in all zoning districts where agricultural uses are allowed. These development standards support the preservation of agricultural soils and protect productive farmland not on prime soils. One of these development standards requires new development adjacent to agricultural areas to establish a well-defined buffer zone in the area to be developed. The area to be used as a buffer shall be placed in an easement, required as a condition of project approval.

##### Chapter 21.92 – Regulations to Mitigate for Development on Farmland

Chapter 21.92 of the Zoning Ordinance provides regulations to mitigate the loss of farmland due to development and the conversion of land to non-agricultural uses. The requirements of this ordinance apply to "the redesignation of land from an agricultural designation to any designation other an agricultural designation," but exclude acreage used for inclusionary housing as defined in

Building and Construction Code, Chapter 18.40, and acres used for affordable housing as defined in Section 21.06.005. This chapter requires a Farmland Mitigation Plan for the following activities:

1. Redesignation of land from an agricultural designation, pursuant to the 2010 County of Monterey General Plan (e.g., Farmland, Permanent Grazing, and Rural Grazing) to any designation other than an agricultural designation (e.g., Commercial, Industrial, Residential, or Public/Quasi-Public);
2. Projects that require a Use Permit or Administrative Permit where Farmland [as defined in Monterey County Code Chapter 21.92] in an Agricultural Zone [as defined in Monterey County Code Chapter 21.92][1] is converted to non-agricultural; and
3. Projects where Farmland in an Agricultural Zone is converted to non-agricultural use that require a variance where the maximum building site coverage is exceeded.

The Farmland Mitigation shall meet the Mitigation Requirements outlined in Monterey County Code (County Code), Section 21.92.060, and may be achieved through various methods that include Farmland Conservation Easements or Farmland Deed Restrictions, payment of In-Lieu Fees, or Alternative and Complementary Mitigation to the satisfaction of the Agricultural Advisory Committee.

### *Title 20 – Coastal Zoning (Coastal)*

Section 20.66.030 of the Coastal Zoning Ordinance refers to Part 2 (North County) or Part 3 (Big Sur) of the Monterey County Coastal Implementation Plan for standards for agricultural uses.

### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.080 (Agricultural Development Standards) of the Coastal Implementation Plan provides development standards that support the permanent preservation of prime agricultural soils exclusively for agricultural use and protect productive farmland not on prime soils if it meets state productivity criteria and does not contribute to degradation of water quality. This section states that development adjacent to prime and productive farmland should be compatible with agriculture. It also provides requirements for agricultural buffers.

North County (Part 2) Section 20.144.050 (Forest Resource Development Standards) of the Coastal Implementation Plan requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forester's Assessment and Recommendation shall be required for the removal of three or more trees requiring a coastal development permit or proposed as part of a development where the tree removal would otherwise require a coastal development permit. Section 20.144.050(C) provides specific development standards for tree removal activities.

[1] "Farmland" is defined in Monterey County Code Section 21.92 as land that is classified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance as determined by the Farmland Mapping and Monitoring Program of the California Department of Conservation.

Carmel Area (Part 4) Section 20.146.070 (Agricultural Development Standards) provides guidelines to aid in preservation of existing agriculture (including easements for agricultural buffers) and other land suitable for food production, as well as the associated scenic amenities and open space values.

Carmel Area (Part 4) Section 20.146.060 (Forest Resource Development Standards) requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forest Management Plan is required for tree removal requiring a coastal development permit or for development requiring a coastal development permit where the development includes native tree removal of size or amount. Section 20.146.060(D) provides specific development standards for tree removal activities.

#### *Right to Farm Ordinance*

Chapter 16.40, Protection of Agricultural Activities, of the County Code is commonly referred to as the Right to Farm Ordinance. Its purpose is to promote the long-term protection, conservation, and enhancement of productive and potentially productive agricultural land and to minimize potential conflict between agricultural and non-agricultural land uses in the County.

### Monterey County Office of the Agricultural Commissioner

The Agricultural Commissioner's Office serves as the primary local enforcement agency for state agricultural laws and regulations. Agricultural Commissioners play an important role in promoting agriculture, farm worker health and safety, the protection of environmental resources, and the assurance of a fair marketplace. The Agricultural Commissioner's Office also administers the Agricultural Advisory Committee, reviews development for agricultural buffers, mediates disputes, and controls and eradicates pests harmful to agriculture.

In accordance with Sections 2272 and 2279 of the California Food and Agricultural Code, Monterey County Agricultural Commissioner Juan Hidalgo announced the release of the 2024 Annual Crop and Livestock Report for the County of Monterey. This report reflects a production gross value of $4,992,581,000, which is an increase of 14.7 percent from 2023 crop values.

Additionally, the Agricultural Commissioner's Office prepared a report titled Economic Contributions of Monterey County Agriculture that goes beyond the Annual Crop and Livestock Report by quantifying agriculture's total economic contributions through production, local processing, employment, and economic multiplier effects. The Economic Contributions of Monterey County Agriculture study shows that in 2023 agriculture contributed a total of $11.706 billion to the County economy, which exceeds the $4.353 billion value from the 2023 County of Monterey Crop & Livestock Report. Agricultural production and processing also directly supported 56,365 employees, plus another 24,951 from multiplier effects. Agriculture ranked #1 among industries in Monterey County for direct economic output, as well as for direct employment.

## 4.2.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to agricultural resources.

Monterey County contains some of the most productive farmland in the United States. According to the Monterey County Farm Bureau, crops grown in Monterey County supply significant portions of the total national pounds produced each year, including leaf lettuce (61 percent), celery (57 percent), head lettuce (56 percent), broccoli (48 percent), spinach (38 percent), cauliflower (30 percent), strawberries (28 percent), and wine grapes (3.6 percent) (Monterey County Farm Bureau 2022). The most productive and lucrative farmlands in Monterey County are in the North County (inland and coastal), Greater Salinas, and Central Salinas Valley planning areas. The Salinas Valley accounts for nearly all of the agricultural production in Monterey County. Several factors, including climate, fertile soils, and the availability of irrigation water, have resulted in the Salinas Valley's agricultural productivity. For instance, the Salinas River winds through the valley, and its aquifer is the main source of water for agriculture. The north end of the Salinas Valley opens to the Pacific Ocean, which is the source of the marine influence that cools the valley, creating ideal conditions for a wide range of crops. The unique geography of the Salinas Valley allows for the production of cool-season vegetable crops due to the marine influence that produces abundant summer fog. The marine influence diminishes with distance from the ocean, producing a gradient of climate that allows the production of a wide range of crops (County of Monterey 2008). These agricultural uses provide revenue for the County while preserving rural character and maintaining open space and scenic views.

The 2024 Annual Crop and Livestock Report, prepared by the Monterey County Agricultural Commissioner's Office, reported a production gross value of $4,992,581,000 in 2024. The 2025 Economic Contributions of Monterey County Agriculture, prepared by the Agricultural Commissioner's Office, estimates $11.706 billion in total agricultural contributions to Monterey County's economy (in 2023). Additionally, this study reports that Monterey County agricultural production directly employed 29,294 people in 2023 (not including food processing or public sector jobs in agriculture). Indirect employment (from business-to-business supplier purchases) in the agricultural sector included 11,494 jobs in 2023 (Monterey County Office of the Agricultural Commissioner 2025).

### 4.2.2.1 Agricultural Land Use

#### Agricultural Uses in UMC (Inland)

According to the 2010 General Plan Land Use Element, agriculture is the largest land use in UMC, representing almost 60 percent of the total land area. Other land uses include public/quasi-public uses (approximately 28 percent), residential (0.7 percent), commercial (0.03 percent), and industrial

(0.3 percent). The majority of the remaining land in UMC is federally owned (e.g., national forests, military bases, and Bureau of Land Management) land (County of Monterey 2010a).

As of 2022, there are 1,338,477 acres of farmland in Monterey County (USDA, National Agricultural Statistics Service 2022). Out of approximately 1.3 million acres of Monterey County land dedicated to agriculture, most of this area (approximately 80 percent) is used for grazing (County of Monterey 2010b). Pursuant to Section 21.92.020(C) of the County Code, agricultural zone means any land that has a zoning district designation of Farmland (F), Permanent Grazing (PG), and Rural Grazing (RG). In addition, the Limited Agricultural (A) zoning district is an overlay, or combining district, intended to provide for some agricultural use of land while placing limits on the number of animals and intensity of agricultural uses in those areas, which are not suitable by size, terrain, neighborhood uses, or similar constraints for extensive agricultural use, pursuant to Section 21.48 of the County Code.

Other zoning designations in the UMC allow for limited agricultural operations. For example, the Public/Quasi-Public (PQP), Rural Density Residential (RDR), and Low Density Residential (LDR) zoning designations allow for crop farming, intermittent livestock farming and animal husbandry, and the cultivation of Christmas trees. The Medium Density Residential (MDR) zoning designation allows for intermittent livestock farming and animal husbandry, and the cultivation of Christmas trees. The High Density Residential (HDR), Agricultural Industrial (AI), Heavy Commercial (HC), and Light Commercial (LC) zoning designations allow the cultivation of Christmas trees. The Heavy Industrial (HI) zoning designation allows for the cultivation of Christmas trees, cannabis cultivation, and agricultural processing plants. Additionally, the Limited Industrial Hemp (HMP) zoning designation allows for industrial hemp cultivation and use of an existing agricultural processing plant for industrial hemp processing.

### Agricultural Uses in UMC (Coastal)

Agricultural zoning districts in the UMC Coastal Zone include Coastal Agricultural Preserve (CAP (CZ)) and Agricultural Conservation (AC (CZ)). As described for the UMC inland areas, the Limited Agricultural (A) zoning district is an overlay, or combining district, that allows for some agricultural use of land while placing limits on the intensity of agricultural uses in those areas that are not suitable for extensive agricultural use. Other zoning designations in the UMC Coastal Zone that allow for limited agricultural operations include the PQP (CZ), RDR (CZ), and LDR (CZ) zoning designations, which allow for crop farming, intermittent livestock farming and animal husbandry, and the cultivation of Christmas trees. The MDR (CZ) zoning designation allows for intermittent livestock farming and animal husbandry, and the cultivation of Christmas trees. The HDR (CZ), AI (CZ), and Coastal General Commercial (CGC (CZ)) zoning designations allow the cultivation of Christmas trees. Additionally, the HI (CZ) zoning designation allows for the cultivation of Christmas trees, cannabis cultivation, and agricultural processing plants.

### Agricultural Uses Within the Project Area

Within the project area, Opportunity Sites 1 and 2 are currently zoned for agricultural uses (F/40) and total approximately 106 acres. There are a total of 10 opportunity sites currently zoned F/40, PQP, LDR, or HDR that have existing agricultural operations on-site, for a total area of 167.59 acres (Table 4.2-1, Agricultural Uses Within the Opportunity Sites).

**Table 4.2-1. Agricultural Uses Within the Opportunity Sites**

| Opportunity Site No. | Existing Use | Current Zoning | Size (acres) |
|---|---|---|---|
| 1 | Row crops | F/40 | 95.31 |
| 2 | General agricultural | F/40 | 10.68 |
| 19 | Boutique crops | LDR/1-D-S-RAZ | 2.63 |
| 20 | Row crops | LDR/1-D-S-RAZ | 5.33 |
| 21 | Row crops | LDR/1-D-S-RAZ | 2.82 |
| 22 | Row crops | LDR/1-D-S-RAZ | 6.25 |
| 24 | Row crops | MU/15-D | 31.53 |
| 25 | Row crops | PQP | 5.66 |
| 26 | Row crops | HDR/10 | 1.17 |
| 37 | General agricultural | LDR/1-D-S-RAZ | 6.21 |
| | | **Total** | **167.59** |

**Source:** HEU6 Chapter 7, Sites Inventory Analysis and Methodology.
**Notes:** F/40 = Farmlands 40; HDR/10 = High Density Residential 10; LDR/1-D-S-RAZ = Low Density Residential/Maximum Gross Density of 1 acre/unit-Design Control-Site Plan Review-Residential Allocation Zoning; MU/15-D = Mixed Use; PQP = Public/Quasi-Public.

Opportunity Sites 5 and 6 are zoned with the Limited Agricultural Combining District: MDR/4-A-UR (Medium Density Residential/4 units per acre-Limited Agricultural-Urban Reserve). However, currently there are no agricultural operations on these two opportunity sites. Instead, there are some limited residential and non-residential structures along the edges of the sites. Similarly, Site 42 is in the Agricultural and Winery Corridor Plan area but is not currently zoned or used for agricultural operations.

Additionally, limited agricultural operations are allowed in other zoning designations as discussed in the previous subheading (Agricultural Uses in UMC – Inland). Six opportunity sites are currently zoned PQP, three are zoned RDR, 12 are zoned LDR, six are zoned MDR, six are zoned HDR, two are zoned HC, five are zoned LC, and two are zoned HI.

### 4.2.2.2 Important Farmland and Grazing Land

The DOC FMMP produces Important Farmland Maps that combine technical soil ratings and current land use information. The DOC applies specific criteria for categorizing important farmlands as follows (DOC 2025a):

- **Prime Farmland** is farmland with the best combination of physical and chemical features (soil quality, growing season, moisture supply) able to support long-term

agricultural production. This land has the soil quality, growing seasons, and moisture needed to produce sustained high yields.

- **Farmland of Statewide Importance** is farmland other than Prime Farmland with a good combination of physical and chemical characteristics but with minor shortcomings, such as greater slopes or less ability to store soil moisture. The land must also have been under irrigated production within the past 4 years.
- **Unique Farmland** is land consisting of lesser quality soils used to produce the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones. The land must also have been under irrigated production within the past 4 years.
- **Farmland of Local Importance** is land that would be classified as Prime Farmland or Farmland of Statewide Importance but lacks available irrigation water. This land could be planted with dryland crops of barley, oats, and wheat and includes land in production of major crops, dairy lands, or land within agricultural zones or contracts.
- **Grazing Land** is land on which existing vegetation is suited for livestock grazing. The minimum mapping unit for grazing land is 40 acres.
- **Urban and Built-Up Land** is land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for developed purposes. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land** is land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- **Water** includes perennial water bodies with an extent of at least 40 acres.

"Important Farmland" consists of "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland."

## Important Farmland in Monterey County

Table 4.2-2, Agricultural Land Category Summary, summarizes the various types of agricultural land and other land in Monterey County, as inventoried by the DOC's FMMP.

**Table 4.2-2. Agricultural Land Category Summary**

| Agricultural Land Category | 2018 | 2020 | 2018–2020 (%) |
|---|---|---|---|
| Prime Farmland | 165,627 | 164,342 | -0.8 |
| Farmland of Statewide Importance | 44,703 | 44,706 | +0.0 |
| Unique Farmland | 26,665 | 26,317 | -1.3 |
| *Important Farmland Subtotal* | *236,995* | *235,365* | *-0.7* |
| Grazing Land | 1,062,197 | 1,060,669 | -0.1 |
| *Agricultural Land Subtotal* | *1,299,192* | *1,296,034* | *-0.02* |
| Urban Land | 58,444 | 59,200 | +1.3 |
| Other | 757,737 | 760,343 | -0.3 |
| Water | 5,381 | 5,177 | -3.8 |
| **Total Land** | **2,120,754** | **2,120,754** | **No Change** |

**Source:** DOC 2025b.

As a percentage of total land in Monterey County, agricultural uses have held constant at more than 61 percent for the past nearly 40 years. While several thousand acres of agricultural land were converted to urban uses during that period, land continues to be brought into production, and, as of 2020, urban uses continue to represent less than 3 percent of total land use in Monterey County (Table 4.2-3, Agricultural Land Category as a Percentage of Monterey County Area).

**Table 4.2-3. Agricultural Land Category as a Percentage of Monterey County Area**

| Agricultural Land Category | 1984 | 1994 | 2006 | 2010 | 2020 |
|---|---|---|---|---|---|
| Important Farmland | 10.6% | 10.6% | 11.1% | 11.3% | 11.1% |
| Grazing Land | 51.0% | 50.9% | 50.2% | 50.0% | 50.2% |
| *Agricultural Land Subtotal* | *61.6%* | *61.5%* | *61.3%* | *61.3%* | *61.3%* |
| Urban Land | 2.0% | 2.2% | 2.6% | 2.5% | 2.7% |
| Other | 36.1% | 35.9% | 35.7% | 35.7% | 35.9% |
| Water | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% |
| **Total Land** | **100%** | **100%** | **100%** | **100%** | **100%** |

**Source:** DOC 2025c.
**Note:** Totals may not add up due to rounding.

## Loss of Important Farmland

While the percent of land in Monterey County in agricultural use has remained constant at approximately 61 percent over the past 40 years, a net total of 3,094 acres of agricultural land was converted to urban land between 2006 and 2020 (refer to Table 4.2-4, Agricultural Land Converted to Urban Land [2006–2020]). Of this net total acreage, 1,071 acres (34.6 percent) was classified as Important Farmland. This equates to an average loss of approximately 76 acres of Important Farmland per year. However, even with the conversion, the percentage of agricultural land in Monterey County has remained constant because other lands have been brought into agricultural use, even as some agricultural land has been converted to urban uses.

**Table 4.2-4. Agricultural Land Converted to Urban Land (2006–2020)**

| Agricultural Land Category | Acres Converted to Urban Land | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2006–2008 | 2008–2010 | 2010–2012 | 2012–2014 | 2014–2016 | 2016–2018 | 2018–2020 | Total |
| Prime Farmland | 203 | 174 | 100 | 48 | 84 | 103 | 232 | 944 |
| Farmland of Statewide Importance | 20 | 3 | 15 | 2 | 2 | 15 | 25 | 83 |
| Unique Farmland | 12 | 7 | 12 | 4 | 2 | 1 | 4 | 44 |
| *Important Farmland Subtotal* | *237* | *184* | *127* | *54* | *89* | *119* | *261* | *1,071* |
| Grazing Land | 10 | 38 | 249 | 19 | 27 | 880 | 800 | 2,023 |
| **Agricultural Land Total** | **247** | **222** | **376** | **73** | **116** | **999** | **1,061** | **3,094** |

**Source:** DOC 2020.
**Notes:** Land Use Conversion Tables: 2006–2008, 2008–2010, 2010–2012, 2012–2014, 2014–2016, 2016–2018, 2018–2020. These seven tables are available online through the Farmland Mapping and Monitoring Program.

## Important Farmland Within the Project Area

Approximately 297.15 acres of Important Farmland have been mapped in the project area (Table 4.2-5, Agricultural Land Within the Project Area [Acres]). In addition, approximately 0.02 acre of Grazing Land occurs in the project area (in Site 24). Although this land is identified by the DOC as Important Farmland, it should be noted that not all of this land is currently zoned for or being operated as agriculture (refer to Table 4.2-1). Figure 4.2-1, Important Farmlands in Monterey County, and Figures 4.2-1a through 4.2-1i, Important Farmlands, depict the Important Farmland and Grazing Land in the project area.

**Table 4.2-5. Agricultural Land Within the Project Area (Acres)**

| Agricultural Land Use | Acres Within the Project Area |
|---|---|
| Prime Farmland | 86.03 |
| Farmland of Statewide Importance | 210.91 |
| Unique Farmland | 0.21 |
| *Important Farmland Subtotal* | *297.15* |
| Grazing Land | 0.02 |
| **Agricultural Land Total** | **297.17** |

**Source:** DOC 2025c.

A total of 20 opportunity sites are within or partially within land identified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the DOC's FMMP. If even a small portion of the opportunity site is in Important Farmland, it is still identified below (Table 4.2-6, Opportunity Sites Identified as Important Farmland and Grazing Land). Additionally, as noted above, Site 24 is partially in land identified as Grazing Land.

**Table 4.2-6. Opportunity Sites Identified as Important Farmland and Grazing Land**

| Opportunity Site No. | Category | Acreage |
|---|---|---|
| 1 | Prime Farmland | 89.14 |
| | Farmland of Statewide Importance | 1.98 |
| 2 | Prime Farmland | 8.57 |
| 3 | Prime Farmland | 5.80 |
| 4 | Prime Farmland | 0.79 |
| 5 | Farmland of Statewide Importance | 0.05 |
| 12 | Unique Farmland | 0.08 |
| 14 | Prime Farmland | 0.15 |
| 15 | Prime Farmland | 0.30 |
| 18 | Prime Farmland | 1.69 |
| 19 | Prime Farmland | 2.63 |
| 20 | Prime Farmland | 5.28 |
| 21 | Prime Farmland | 1.33 |
| 22 | Prime Farmland | 5.50 |
| 24 | Prime Farmland | 30.28 |
| | Grazing Land | 0.02 |
| 25 | Prime Farmland | 4.91 |
| 26 | Prime Farmland | 0.97 |
| 37 | Prime Farmland | 5.48 |
| 50 | Prime Farmland | 0.08 |
| 52 | Grazing Land | 59.90 |

**Source:** DOC 2022.
**Notes:** Opportunity sites are conservatively identified in this table if even a small portion of the total parcel is mapped as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Grazing Land by the DOC's FMMP.

#### 4.2.2.3 Williamson Act Contracts and Agricultural Conservation Easements

The DOC oversees the Williamson Act Program (California Land Conservation Act of 1965), which is designed to keep agricultural lands in production through the creation of Agricultural Preserve and Farmland Security Zone (FSZ) long-term contracts, in return for reduced property taxes. The FSZ became effective in Monterey County in 1998. FSZs are generally required to be at least 100 acres in size and offer landowners an additional 35 percent reduction in taxable value. Approximately 750,000 acres of land are under Williamson Act Contract in Monterey County, with 32,000 acres under the FSZ. All FSZs in Monterey County are in the Salinas Valley (DOC 2024).

There are no Williamson Act Contracts in the project area.

In addition, the Monterey County Agricultural and Historical Land Conservancy, Incorporated, was created in 1984 by Monterey County residents (currently known as the Ag Land Trust). The Ag Land Trust accepts agricultural conservation easements by gift or as a result of direct purchase

from landowners to serve as a flexible resource protection tool. More than 46,000 acres are currently protected under the Ag Land Trust (Monterey County Farm Bureau 2022).

#### 4.2.2.4 Agricultural Economy

The 2024 County of Monterey Crop & Livestock Report indicates that Monterey County's agricultural economy was more than $4.99 billion (production gross value) in 2024, which is an increase of 14.7 percent from 2023 (County of Monterey 2024). The 2025 Economic Contributions of Monterey County Agriculture report expands on this by estimating a total of $11.706 billion to Monterey County's overall economy in 2023 (the most recently available complete data). Agriculture accounts for more than 25 percent of employment in Monterey County during peak seasons. The agriculture sector and related food processing activities together constitute important export activities that bring money into Monterey County. Table 4.2-7, Monterey County Agricultural Economy (2012–2024), summarizes the contribution of the Monterey County agricultural economy between 2012 and 2024.

**Table 4.2-7. Monterey County Agricultural Economy (2012–2024)**

| Year | Agricultural Economy (billions of dollars) | Rank in State |
|---|---|---|
| 2024 | $4.99 | N/A |
| 2023 | $4.35 | N/A |
| 2022 | $4.64 | 4 |
| 2021 | $4.1 | 4 |
| 2020 | $4.02 | 4 |
| 2019 | $4.4 | 4 |
| 2018 | $4.26 | 4 |
| 2017 | $4.43 | 4 |
| 2016 | $4.26 | 4 |
| 2015 | $4.84 | 4 |
| 2014 | $4.49 | 4 |
| 2013 | $4.38 | 4 |
| 2012 | $3.14 | 4 |

**Sources:** CDFA 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022; Monterey County Office of the Agricultural Commissioner 2024, 2025.

#### 4.2.2.5 Forest and Timberland Resources

### Forest Land Within the UMC

According to the County's geographic information systems (GIS) data for vegetative cover, there are approximately 481,188.49 acres of woodland, conifer, and forest vegetative communities in the UMC (refer to Table 4.2-8, Forest Vegetation Types in the Unincorporated Monterey County). Figure 4.2-2, Forest Vegetation Types in Unincorporated Monterey County, and Figures 4.2-1a through 4.2-1i, Forest Vegetation Types, depict the forest and woodland vegetation types in UMC.

**Table 4.2-8. Forest Vegetation Types in the Unincorporated Monterey County**

| Vegetation Type | Acres |
|---|---|
| Blue Oak Woodland | 5,606.18 |
| Mixed Conifer | 28,976.61 |
| Monterey Pine Forest | 776.83 |
| Oak Woodland | 424,090.91 |
| Redwood Forest | 21,737.96 |
| **Total** | **481,188.49** |

**Source:** County of Monterey 2026.

## Forest Land Within the Project Area

Forest land is defined by PRC Section 12220(g), as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Based on vegetative cover mapping prepared for the project, there are 18 opportunity sites that support mixed conifer forest and/or oak woodland (Table 4.2-9, Forest Land Within the Project Area; refer to Section 4.4, Biological Resources). Of these, there are 12 sites (Opportunity Sites 8, 10, 16, 22, 40, 43, 45, 46, 48, 52, 53, and 56) where the forest and/or woodland area covers at least 10 percent of the site. Eleven of these sites (Opportunity Sites 8, 10, 16, 22, 40, 43, 45, 46, 48, 52, and 56) also have zoning designations that allow for tree farming, the cultivation of Christmas trees, or other management of forest resources. Therefore, these 11 sites could be considered forest land, as defined by PRC Section 12220(g).

**Table 4.2-9. Forest Land Within the Project Area**

| Site | Acreage of Forest or Woodland | Parcel Size (acres) | Percentage of Forest Cover | Current Zoning |
|---|---|---|---|---|
| **8** | **1.77** | **4.25** | **42%** | **LDR/2.5** |
| 9 | 0.02 | 4.09 | 0.5% | RDR/5 |
| **10** | **4.43** | **7.01** | **63%** | **LC** |
| **16** | **3.48** | **4.46** | **78%** | **MDR/2-D(CZ)** |
| 20 | 0.001 | 5.33 | 0% | LDR/1-D-S-RAZ |
| 21 | 0.00008 | 2.82 | 0% | LDR/1-D-S-RAZ |
| **22** | **4.03** | **6.25** | **64%** | **LDR/1-D-S-RAZ** |
| 31 | 0.79 | 13.04 | 6% | PQP-D-S |
| 37 | 0.007 | 6.21 | 0.1% | LDR/1-D-S-RAZ |
| 39 | 0.002 | 0.53 | 0.3% | LDR/1 |
| **40** | **26.78** | **26.78** | **100%** | **RDR/5.1-UR-D-S** |
| **43** | **1.57** | **1.57** | **100%** | **MDR/2-D(CZ)** |
| **45** | **4.19** | **4.62** | **91%** | **RDR/5.1-UR-D-S** |

**Table 4.2-9. Forest Land Within the Project Area**

| Site | Acreage of Forest or Woodland | Parcel Size (acres) | Percentage of Forest Cover | Current Zoning |
|---|---|---|---|---|
| **46** | **4.79** | **19.59** | **24%** | **PQP-D-S** |
| **48** | **4.26** | **16.09** | **26%** | **MDR/4 (CZ) and CGC(CZ) [split zoned parcel]** |
| **52** | **10.39** | **69.86** | **15%** | **RC/10-UR-D-S** |
| 53 | 19.48 | 47.52 | 41% | C-R (Marina) |
| **56** | **0.82** | **5.82** | **14%** | **LDR/1-D-S-RAZ, LDR/B-6-D-S-RAZ** |

**Source:** County of Monterey 2026.
**Notes:** The percentage of forest cover on the opportunity sites was calculated by dividing the acreage of forest or woodland vegetative cover (as mapped by the County's GIS) by the total parcel size.
**Bold and Shaded** = the 11 sites could be considered forest land.

### Timberland Within the Project Area

Timberland is defined by PRC Section 4526, as land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Therefore, all sites with undeveloped land and current zoning designations that allow for tree farming or the cultivation of Christmas trees could be considered timberland as defined by PRC Section 4526. As described in Section 4.2.2.1, there are many zoning designations that allow these uses, including F, PG, RG, PQP, PQP (CZ), RDR, RDR (CZ), LDR, LDR (CZ), MDR, MDR (CZ), HDR, HDR (CZ), HI, HI (CZ), AI, AI (CZ), HC, LC, CAP (CZ), AC (CZ), and CGC (CZ). Therefore, the majority of opportunity sites could be considered timberland, with the exception of Sites 11 through 15, 24, 30, 35, 41, 51, and 53 through 55.

A timberland production zone is defined by California Government Code, Section 51104(g), as an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. There are no timberland production zones as defined by California Government Code, Section 51104(g), in the project area.

## 4.2.3 Method of Analysis

Using the criteria for determining significance described below, analysis of the impacts of the project on agricultural resources is based on the location and designation of the farmland in the County. Important Farmland, land zoned for farming, and land under Williamson Act Contract were specifically analyzed. Additionally, the location of other development in relation to farmland in the County was also used to analyze impacts. A qualitative analysis is provided to determine if the development and land use activities contemplated by the project would create substantial impact on farmland in the County.

Given that the thresholds of significance in this section are primarily based on the location and soil or vegetation conditions of each site rather than the number of housing units proposed (refer to Section 4.2.4, Thresholds of Significance), this section of the PEIR evaluates each of the opportunity site parcels to determine impacts on agriculture and forestry resources.

## 4.2.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on agriculture and forestry resources if it would:

- **Threshold 1:** Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- **Threshold 2:** Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- **Threshold 3:** Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- **Threshold 4:** Result in the loss of forest land or conversion of forest land to non-forest use.
- **Threshold 5:** Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

## 4.2.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to agriculture and forestry resources that could result from the implementation of the project.

### 4.2.5.1 Threshold 1: Conversion of Farmland to Non-Agricultural Use

**Threshold 1:** Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

#### Impact Analysis

Buildout of the HEU6 would result in high density residential development on 20 opportunity sites that are at least partially mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as mapped by the DOC's FMMP), totaling approximately 165 acres of Important Farmland (Table 4.2-10, Important Farmland Categories Within the Project Area by Plan Area). Approximately 162.88 acres of Prime Farmland, 2.04 acres of Farmland of Statewide Importance, and 0.08 acre of Unique Farmland would be rezoned to urban residential and mixed uses.

**Table 4.2-10. Important Farmland Categories Within the Project Area by Plan Area**

| Community Plan Area | Important Farmland Category | Opportunity Site | Total Acreage of Important Farmland Within the Site |
|---|---|---|---|
| Carmel Valley Master Plan | Prime Farmland | 18, 19, 20, 21, 22, 37 | 21.91 |
| Central Salinas Valley Area Plan | Prime Farmland | 25, 26 | 5.89 |
| Greater Salinas Area Plan | Prime Farmland | 1, 2, 3, 4 | 104.29 |
| | Farmland of Statewide Importance | 1, 5 | 2.04 |
| North County Inland Area Plan | Prime Farmland | 14, 15, 50 | 0.53 |
| | Unique Farmland | 12 | 0.08 |
| Toro Area Plan | Prime Farmland | 24 | 30.26 |
| | | **Total** | **165.00** |

**Source:** DOC 2022.
**Notes:** Opportunity sites are conservatively identified in this table if even a small portion of the total parcel is mapped as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the DOC's FMMP.

The most current available FMMP data indicates that there are 1,296,034 acres of agricultural land in Monterey County, consisting of 235,365 acres of Important Farmland. As such, implementation of the HEU6 would result in the conversion of 0.16 percent of Monterey County's Important Farmland. While this percentage is small, this impact is considered to be potentially significant because the land would be permanently removed from the potential for agricultural production.

It should be noted that of these 20 opportunity sites, 10 (Opportunity Sites 1, 2, 19 through 22, 24 through 26, and 37) are currently in use with agricultural operations (refer to Table 4.2-1), three (Opportunity Sites 7, 12, and 15) are undeveloped, and five (Opportunity Sites 3 through 5, 14, and 18) are primarily vacant but partially developed with residential or religious center uses. Sites 50 and 52 are entirely developed with commercial uses and are unlikely to be used for agricultural operations in the future even without implementation of the project. Also, Opportunity Sites 49 and 50 were selected as part of the project because of their proximity to agricultural uses and the potential to house agricultural workers. As such, while implementation of the project would convert some Important Farmland to non-agricultural uses, it would also provide much needed housing for agricultural workers for the continued operation of existing agricultural uses in UMC.

Further, as noted in Section 7.4 of the HEU6, the County considered sites in priority planning areas and infill when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands given the importance to the local economy. In addition, the HEU6 includes several policies to cluster development or increase density on opportunity sites to minimize the direct loss of agricultural resources and to encourage the production of farmworker housing.

As described in Section 4.2.1, Regulatory Setting, Chapter 21.92 of the County Code requires Farmland Mitigation for projects that would redesignate land from agricultural land use to a non-

agricultural land use or projects where Farmland (as defined in County Code Chapter 21.92) in an agricultural zone is converted to a non-agricultural use and require a Use Permit, Administrative Permit, or variance where the maximum building site coverage is exceeded. Farmland Mitigation includes submittal of a Farmland Mitigation Plan as part of the development application. The Farmland Mitigation Plan is required to include Mitigation Lands protected by a Farmland Conservation Easement, Farmland Deed Restriction, or by a Qualifying Conservation Entity purchased using In-Lieu Fees. If the applicant is unable to procure Mitigation Lands, an In-lieu Fee or "Alternative and Complementary Mitigation" is required instead.

Implementation of the HEU6 would rezone opportunity sites to HDR; therefore, future residential development projects at these sites would not trigger the requirement for a Farmland Mitigation Plan in accordance with Chapter 21.92 of the County Code. Additionally, without project-specific details, it would be speculative for the County to prepare Farmland Mitigation Plans for every opportunity site where Farmland (as defined in County Code Chapter 21.92) in an agricultural zone is converted to a non-agricultural use. Therefore, the project's impact related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use is considered potentially significant without mitigation.

Mitigation Measure (MM-) AG-OBJ-1 and MM-AG-CONS-2 would require agriculturally zoned sites (Opportunity Sites 1 and 2) to prepare a Farmland Mitigation Plan in accordance with the purpose and intent of Chapter 21.92 of the County Code. MM-AG-OBJ-1 would apply for by-right housing developments streamlining under the Objective Process, and MM-AG-CONS-2 would apply for discretionary housing developments streamlining under the Consistency Process of the HEU6. Therefore, with implementation of MM-AG-OBJ-1 and MM-AG-CONS-2, future residential development projects on opportunity sites currently zoned for agricultural use would be required to prepare and submit a Farmland Mitigation Plan as part of the development application.

MM-AG-OBJ-3 and MM-AG-CONS-4 would require preparation of a Land Evaluation and Site Assessment (LESA) report for residential development on opportunity sites with existing agricultural operations or land mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the DOC's FMMP). MM-AG-OBJ-3 and MM-AG-CONS-4 would reduce potential impacts to Important Farmland by requiring a LESA report to quantitatively evaluate the development's potential impacts on agricultural resources. If the LESA report concludes that the residential development would result in significant impacts on agricultural resources, a Farmland Mitigation Plan would be required.

MM-AG-OBJ-1 and MM-AG-CONS-2 would reduce potential impacts to land zoned for agriculture by protecting other existing agricultural operations in the UMC. However, the Farmland Mitigation Plan required for MM-AG-OBJ-1 and MM-AG-CONS-2 would provide only

partial mitigation for the impact to existing agricultural operations (refer to Table 4.2-1) because the mitigation would not replace these existing agricultural uses elsewhere in the UMC, and undeveloped land mapped as Important Farmland would still be converted to a non-agricultural use under buildout of the HEU6. As such, the project's impact related to the conversion of Important Farmland to a non-agricultural use is considered significant and unavoidable.

## Significance of Impact

Potentially significant impact.

## Mitigation Measures

Compliance with the intent and purpose of Chapter 21.92 of the County Code will be required for land zoned for agricultural (e.g., Opportunity Sites 1 and 2) through MM-AG-OBJ-1 and MM-AG-CONS-2 below. For residential development on opportunity sites with existing agricultural operations or land mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the DOC's FMMP), a LESA report is required under MM-AG-OBJ-3 and MM-AG-CONS-4 below.

**MM-AG-OBJ-1:** Applicants for by-right uses streamlining under the Objective Process that have a zoning district designation of Farmland, Rural Grazing, or Permanent Grazing (e.g., Opportunity Sites 1 and 2) would be required to submit a Farmland Mitigation Plan as part of the development application in accordance with Chapter 21.92 of the Monterey County Code. The Farmland Mitigation Plan shall be required to include Mitigation Lands protected by a Farmland Conservation Easement, Farmland Deed Restriction, or a Qualifying Conservation Entity purchased using In-Lieu Fees. If the applicant is unable to procure Mitigation Lands, an In-lieu Fee would be required instead. "Alternative and Complementary Mitigation," as described in Chapter 21.92 of the Monterey County Code, shall not be available as a mitigation method for by-right housing projects streamlining under the Objective Process. Definitions shall be consistent with those identified in Section 21.92.020 of the Monterey County Code.[2]

**Farmland Mitigation Plan.**

A. The applicant shall submit a Farmland Mitigation Plan when the applicant submits an application to the County. The Farmland Mitigation Plan shall contain all information and documentation in sufficient detail, as specified below:
    1. Map and calculate the applicable project acreage of the following, as mapped by the California Department of Conservation's Farmland

[2] Section 21.92.020 – Definitions of the Monterey County Code. https://library.municode.com/ca/monterey_county/codes/code_of_ordinances?nodeId=TIT21ZO_CH21.92REMIDEFA_21.92.020DE.

Mapping and Monitoring Program: Prime Farmland, Farmland of Statewide importance, Unique Farmland, and Local Farmland; and

2. The proposed type of mitigation that will be provided in order to mitigate for conversion of Farmland.

B. The Farmland Mitigation Plan shall contain all information and documentation in sufficient detail, as specified here:
    1. The Qualifying Conservation Entity that will hold the Mitigation Land or administer the In-lieu Fees, if applicable;
    2. The acreage that would be preserved through mitigation, the amount of in-lieu fees that would be paid, or the proposed alternative and complementary mitigation;
    3. The location of the Mitigation Land, if applicable; and
    4. The proposed Farmland Conservation Easement or Farmland Deed Restriction, if applicable.

**Mitigation Lands.**

A. Mitigation Lands protected by a Farmland Conservation Easement, Farmland Deed Restriction, or by a Qualifying Conservation Entity purchased using In-Lieu Fees shall meet all of the following criteria.
    1. Be designated as Farmland and in an Agricultural Zone;
    2. Be acquired from willing sellers only;
    3. Be of adequate size, configuration, and location to be viable for continued agricultural operations and use;
    4. Be of substantially equivalent Farmland Mapping and Monitoring Program (FMMP) Important Farmland Category or better;
    5. Have a Water Supply available for continued agricultural operations and use;
    6. Be located within the County of Monterey; and
    7. Not be on land that has an existing easement or deed restriction that prevents converting the property to nonagricultural use. Unless the land is under a Williamson Act contract, per Government Code section 51200 et seq.

**Mitigation Requirements.**

A. Mitigation shall be required for all residential development sites streamlining under the Housing Element Update Sixth Cycle (HEU6) that have a zoning district designation of Farmland, Rural Grazing, or Permanent Grazing.
B. The applicant cannot utilize Mitigation Land or the portion of Mitigation Land that was previously dedicated from a separate project or separate actions by a third party to satisfy their mitigation requirements.

C. The Base Mitigation Ratio shall be consistent with the Base Mitigation Ratio for activities inside of Community Areas, Rural Centers, and Affordable Housing Overlays:
    1. Prime Farmland shall be mitigated for at a replacement ratio of 1.5:1. This means for every acre of Prime Farmland converted or developed, one and one-half acres shall be protected.
    2. Statewide, Unique, and Local Farmland shall be mitigated for at a replacement ratio of 1.25:1. This means for every acre of Statewide, Unique, and Local Farmland converted or developed, one and one-quarter acres shall be protected.

D. Priority Projects. If the land being converted is for the development of dwelling units (pursuant to Section 21.06.370 of the Monterey County Code) and has a gross density (pursuant to Section 21.06.300 of the Monterey County Code) of twenty-five (25) dwelling units/acre gross or greater, the Base Mitigation Ratio shall be reduced by up to a maximum of .125.

E. Priority Areas for Mitigation. Mitigation Lands within a priority area shall have the following adjustment factors applied, where relevant, to modify the Base Mitigation Ratio:
    1. If the Mitigation Land is determined to be in a high potential groundwater recharge area identified by a recognized groundwater sustainability agency, the Base Mitigation Ratio shall be reduced by up to a maximum of .125.
    2. If the Mitigation Land is determined to include a water quality improvement project that addresses agricultural pollutants and provides multi-property or sub-watershed benefits that help meet the discharge requirements intended to comply with the Irrigated Lands Regulatory Program and supported by an approved Third-Party Group or Programs, as recognized by the State of California Central Coast Regional Water Quality Board, the Base Mitigation Ratio shall be reduced by up to a maximum of .125.
    3. If the Mitigation Land is located in Priority Areas for Mitigation or as identified by the Board of Supervisors, the Base Mitigation Ratio shall be reduced by up to a maximum of .125. Such Priority Areas for Mitigation include both of the following:
        a. Areas along the exterior boundary of Community Areas and Rural Centers as identified in the 2010 General Plan or as amended; and
        b. Areas along the exterior boundary of permanent growth boundaries or permanent agricultural edges, as identified in

Board of Supervisor approved agreements between the County and cities.

**Methods of Mitigation.**

A. Farmland Conservation Easements or Farmland Deed Restrictions. The following minimum requirements shall be incorporated into all Farmland Conservation Easements or Farmland Deed Restrictions to satisfy the requirements of this Chapter. This shall include the conveyance of land within an agricultural land mitigation bank that the Qualifying Conservation Entity manages.
    1. It shall be the applicant's sole responsibility to obtain the required Farmland Conservation Easement or Farmland Deed Restriction, and to ensure they are held by a Qualifying Conservation Entity, pursuant to Section 21.92.090.
    2. The proposed Mitigation Land for Farmland Conservation Easement or Farmland Deed Restriction shall be within the same General Plan Planning Area as the proposed housing project.
    3. The proposed Mitigation Land for Farmland Conservation Easement or Farmland Deed Restriction shall not move from a subbasin with no exceedances of its minimum thresholds in the applicable groundwater sustainability plan, to a different subbasin with exceedances of its minimum thresholds in its applicable groundwater sustainability plan as identified by the recognized groundwater sustainability agency.
    4. If after at least one Good Faith Effort the applicant cannot locate a Farmland Conservation Easement or Farmland Deed Restriction pursuant to the criteria in Subsections A.2 and A.3 of this above Section, then the applicant shall be required to locate a Farmland Conservation Easement or Farmland Deed Restriction elsewhere in Monterey County.
    5. The Farmland Conservation Easement or Farmland Deed Restriction shall include, at a minimum, the following terms:
        a. It shall run with the land, be in perpetuity, and be recorded; unless the County, Qualifying Conservation Entity, and landowner collectively agree to move or transfer the Farmland Conservation Easement or Farmland Deed Restriction;
        b. It shall protect and retain the Water Supply on the Mitigation Land;
        c. It shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land;
        d. It shall prohibit the sale, lease, or conveyance of any interest in the Mitigation Land except for fully compatible agricultural uses; and

e. It shall name and authorize the Qualifying Conservation Entity to enforce all terms of the Farmland Conservation Easement or Farmland Deed Restriction.

6. The applicant, if applicable, shall pay the one-time price to purchase the Farmland Conservation Easement or Farmland Deed Restriction and all associated transaction costs (including, but not limited to, escrow, recording, title policy, appraisal, the Qualifying Conservation Entity's administrative costs), plus a one-time payment sufficient to cover the costs of administering, monitoring, and enforcing the Farmland Conservation Easement or Farmland Deed Restriction.
7. The applicant shall provide documentation to the County that the Farmland Conservation Easement or Farmland Deed Restriction is consistent with this Chapter, and that the terms are acceptable to the Qualifying Conservation Entity.

B. In-lieu Fees. The payment of an In-lieu Fee shall be subject to the following provisions:
   1. Applicants shall make two Good Faith Efforts before applicants are allowed to pay In-lieu Fees to the Qualifying Conservation Entity.
   2. The payment of an In-lieu Fee shall be subject to all the following provisions:
      a. The amount of the In-lieu Fee shall be determined by using the appraised fair market value of acquiring a conservation easement on the land being converted. The value of the conservation easement shall be determined by taking the average of two separate appraisals from two independent real property appraisers. The independent real property appraisers must be included in the list of pre-approved appraisers provided by the County and must have experience valuing conservation easements for the California Department of Conservation Sustainable Agricultural Lands Conservation Program (SALC) or a similar program. The appraisal of fair market value shall use the Agricultural Zone or other zoning designation for the site before the redesignation to HDR included as part of the project rezoning.
      b. The applicant shall be responsible for paying for appraisals.
      c. In addition to the one-time In-lieu Fee for mitigation, the applicant shall pay to the Qualifying Conservation Entity an amount sufficient to cover the costs of managing a Farmland Conservation Easement or Farmland Deed Restriction, including the cost to administer, monitor, and enforce a Farmland Conservation Easement or Farmland Deed

Restriction, and the payment of the estimated transaction costs associated with acquiring a Farmland Conservation Easement or Farmland Deed Restriction.

d. The In-lieu Fees shall be paid to the Qualifying Conservation Entity, and the applicant shall provide evidence of the payment of the In-lieu Fees to the County.

3. The Agricultural Advisory Committee shall determine that documentation regarding the In-lieu Fee is consistent with this mitigation, and that the terms are acceptable to the Qualifying Conservation Entity.

**Timing of Mitigation.**

A. Projects shall provide the Farmland Conservation Easement, Farmland Deed Restriction, or payment of In-lieu Fees prior to or concurrent with the recordation of a parcel or final map or prior to issuance of the first construction permit, whichever occurs first.

**Required Conditions on the Applicable Mitigation Entitlement.**

A. The County shall determine whether an entity qualifies as a Qualifying Conservation Entity.

B. The County shall require that a Qualifying Conservation Entity that receives a Farmland Conservation Easement, Farmland Deed Restriction, or In-lieu Fees for mitigation purposes under this Chapter conform to all of the following requirements.

1. Use of In-lieu Fees. The Qualifying Conservation Entity shall administer In-lieu Fees. These responsibilities cover, without exception, ensuring that In-lieu Fees are held in a separate account adequate to cover the cost of acquiring a Farmland Conservation Easement, Farmland Deed Restriction, and administering, monitoring, and enforcing their long-term use for agricultural mitigation purposes.
2. Enforcement and Monitoring. The Qualifying Conservation Entity shall monitor all Farmland Conservation Easements, Farmland Deed Restrictions, or In-lieu Fees for mitigation purposes acquired in accordance with these regulations and shall review and monitor the implementation of all management and maintenance plans for these lands and easement areas. It shall enforce compliance with the terms of the Farmland Conservation Easement and Farmland Deed Restriction.
3. Reporting. The Qualifying Conservation Entity shall, on or before January 31, each year, make available upon request of the County an

annual report describing the activities undertaken by the entity within the past calendar year under the Farmland Mitigation Plan. The report(s) shall provide the County an accounting of the use of In-lieu Fees remitted to it and the status of all new and existing Farmland Conservation Easements or Farmland Deed Restrictions maintained by the Qualifying Conservation Entity in the County of Monterey.

4. Termination. If a Qualifying Conservation Entity intends or reasonably expects to cease operations, it shall assign any Farmland Conservation Easements, Farmland Deed Restrictions, or In-lieu Fees resulting from this mitigation to another Qualifying Conservation Entity as acceptable and approved by the County of Monterey.

The County shall verify that all standards and requirements listed above are complete and all criteria are met. If the applicant cannot demonstrate that all criteria are met, then they would not be able to streamline under the Objective Process and would be subject to further CEQA.

**MM-AG-CONS-2:** Applicants for developments streamlining under the Consistency Process on opportunity sites that have a zoning district designation of Farmland, Rural Grazing, or Permanent Grazing shall be required to submit a Farmland Mitigation Plan as part of the development application in accordance with Chapter 21.92 of the Monterey County Code. The Farmland Mitigation Plan shall be required to include Mitigation Lands protected by a Farmland Conservation Easement, Farmland Deed Restriction, or by a Qualifying Conservation Entity purchased using In-Lieu Fees.

Refer to MM-AG-OBJ-1, above, for all standards and requirements for MM-AG-CONS-2.

For applicants streamlining under the Consistency Process, the applicant may propose Alternative and Complementary Mitigation at any stage of the mitigation process.

1. All of the following projects contain the means for achieving Alternative and Complementary Mitigation measures:

a. Projects that implement a groundwater sustainability plan to comply with the Sustainable Groundwater Management Act;
b. Projects for water quality improvement that help implement an approved Surface Water Follow-Up Work Plan intended to help irrigated agriculture growers in the County of Monterey comply with the discharge requirements of the Agricultural Order and supported by an approved Third-Party Group or Programs as recognized by the State of California Central Coast Regional Water Quality Board;

c. Projects that are part of a recognized regional plan (such as an Integrated Regional Water Management Plan or a Storm Water Resource Plan) that conserve or improve water quantity and/or quality for the benefit of agriculture in the County of Monterey; and
d. Projects that demonstrate they will protect, preserve, or benefit farmland and the agricultural industry in the County.

2. The total dollar value of the Alternative and Complementary Mitigation project must be equal to or valued more than the appraised fair market value of acquiring a conservation easement on the land being converted. The applicant shall provide documentation substantiating the total dollar value of the Alternative and Complementary Mitigation project. The fair market value of the conservation easement shall be determined by taking the average of two separate appraisals from two independent real property appraisers. The independent real property appraisers must be included in the list of pre-approved appraisers provided by the County and must have experience valuing conservation easements for the California Department of Conservation Sustainable Agricultural Lands Conservation Program or a similar program. The appraisal of fair market value shall use the Agricultural Zone or other zoning designation for the site before the redesignation to HDR included as part of the project rezoning.
3. The applicant shall be responsible for paying for appraisals.
4. To qualify as Alternative and Complementary Mitigation, the proposed alternative shall satisfy all of the following criteria:

    a. The proposed Alternative and Complementary Mitigation may be up to but shall not exceed five percent of the total acreage or total value of the required mitigation, as applicable. Any Alternative and Complementary Mitigation exceeding five percent of the total acreage or total value of the required mitigation shall provide documentation to the Agricultural Advisory Committee and County detailing how the proposed Alternative and Complementary Mitigation is as protective as a Farmland Conservation Easement of a similar acreage or value.

b. The proposed Alternative and Complimentary Mitigation shall promote the long-term protection, conservation, and enhancement of productive or potentially productive Farmland in Monterey County.
c. The applicant shall bear all the costs of the County or a third party reviewing, approving, managing, and enforcing the mitigation.

5. The Agricultural Advisory Committee shall determine that the proposed Alternative and Complementary Mitigation meets the standards listed in 4a through 4c above.

**MM-AG-OBJ-3:** Applicants for by-right residential developments streamlining under the Objective Process on opportunity sites with existing agricultural operations or land mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the California Department of Conservation [DOC] Farmland Mapping and Monitoring Program) shall be required to prepare and submit a Land Evaluation and Site Assessment (LESA) report to the County as part of the development application. The LESA report shall be prepared in accordance with DOC's California Agricultural LESA Model to quantitatively evaluate the development's potential impact on agricultural resources. The LESA report shall be required to evaluate measures of soil resource quality, the development project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. These factors shall be rated, weighted, and combined, resulting in a single numeric score. The project score shall be the basis for making a determination of the development project's potential significance. The County shall ensure that project applicants submit a LESA report as part of the development application.

If the LESA report concludes that the residential development would result in significant impacts on agricultural resources, a Farmland Mitigation Plan in accordance with MM-AG-OBJ-1 shall be required. The County shall ensure that project applicants submit a Farmland Mitigation Plan if the LESA report concludes that the residential development would result in significant impacts on agricultural resources.

**MM-AG-CONS-4:** Applicants for developments streamlining under the Consistency Process on opportunity sites with existing agricultural operations or land mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the California Department of Conservation [DOC] Farmland Mapping and Monitoring Program) shall be required to prepare and submit a Land Evaluation and Site Assessment (LESA) report to the County as part of the development application. The LESA report shall be prepared in accordance with DOC's California Agricultural LESA Model to quantitatively evaluate the development's potential impact on agricultural resources. The County shall ensure that project applicants submit a LESA report as part of the development application.

Refer to MM-AG-OBJ-3, above, for all standards and requirements for MM-AG-CONS-4.

If the LESA report concludes that the residential development would result in significant impacts on agricultural resources, a Farmland Mitigation Plan in accordance with MM-AG-CONS-2 shall be required. The County shall ensure that project

applicants submit a Farmland Mitigation Plan if the LESA report concludes that the residential development would result in significant impacts on agricultural resources.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.2.5.2 Threshold 2: Conflict with Zoning for Agricultural Use or Williamson Act Contract

**Threshold 2:** Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

### Impact Analysis

None of the opportunity sites are currently under Williamson Act Contract, and therefore implementation of the HEU6 would not result in a conflict with a Williamson Act Contract.

There are two opportunity sites (Sites 1 and 2), both located in the Greater Salinas Plan Area, that are currently zoned F/40 (Farmland, 40 acres per dwelling unit) for a total area of approximately 106 acres zoned for agricultural uses. There are also two opportunity sites (Sites 5 and 6) that are currently zoned MDR/4-A-UR with the Limited Agricultural overlay district that total 5.58 acres. The total area of these sites is approximately 111.57 acres.[3] As noted in Section 4.2.2.1, there were 1,338,477 acres of land zoned for agricultural in Monterey County, as of 2022. The conversion of 111.57 acres of land zoned for agricultural is a loss of approximately 0.00008 percent of the total land zoned for agricultural uses in Monterey County. While this is a very small percentage of the total agriculturally zoned land area, this impact would be significant because the land would be permanently removed from agricultural production.

All four sites are adjacent to some residential development, and future development of residential uses on these sites would be consistent with existing surrounding residential uses. Sites 5 and 6 are also designated as Boronda Community Plan area that should be prioritized for development. As previously described, the County considered sites in priority planning areas and infill when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands.

In addition, while not zoned explicitly for agricultural uses, currently six opportunity sites are zoned PQP, three are zoned RDR, 12 are zoned LDR, six are zoned MDR (including Sites 5 and 6 with Limited Agricultural overlay), and two opportunity sites are zoned HI, which all allow for

[3] This analysis conservatively assumes the entire area of each opportunity site would be converted from agriculturally zoned land to non-agricultural uses; however, the planned developable area of each site is smaller than the total area (refer to Chapter 7, Sites Inventory, of the HEU6).

limited agricultural operations (refer to Section 4.2.2.1).[4] The total acreage of these opportunity sites is 438.21 acres, and the total acreage of these opportunity sites, along with the agriculturally zoned opportunity sites discussed above, is 549.78 acres. To conservatively account for these opportunity sites in the conversion of agricultural uses to non-agricultural uses, the conversion of 549.78 acres of land would result in a loss of approximately 0.0004 percent of the total land zoned for agriculture in Monterey County. While this is a very small percentage of the total agriculturally zoned land area, the project would result in the conversion of substantial areas of active agriculture on FMMP land zoned for viable agricultural uses. Therefore, the project's impact associated with the conversion of agriculturally zoned lands and conflicts with agricultural zoning is considered potentially significant without mitigation.

However, as previously described, the opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands. This also allows for large tracts of agricultural lands to stay intact, which is important for scaling and the viability of the agricultural industry. This consideration also minimizes the fragmentation and development encroachment on agricultural lands, while still meeting the state-required Regional Housing Needs Allocation (RHNA) for the HEU6. The HEU6 includes several policies to cluster development or increase density on opportunity sites to minimize the direct loss of agricultural resources. Further, implementation of the HEU6 requires rezoning of non-residential zones in order for the County to meet their state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031. Nevertheless, implementation of the HEU6 would conflict with existing zoning for agricultural uses in the UMC, and impacts would be potentially significant.

Mitigating the loss of agriculturally zoned lands and the decrease of agricultural productivity typically involves the conservation of other agriculturally viable lands and rehabilitating or providing new agricultural productivity elsewhere, respectively. As described in Section 4.2.1, Chapter 21.92 of the County Code requires Farmland Mitigation for projects that would redesignate land from agricultural land use to a non-agricultural land use or projects where Farmland (as defined in County Code Chapter 21.92) in an agricultural zone is converted to a non-agricultural use and require a Use Permit, Administrative Permit, or variance where the maximum building site coverage is exceeded. Farmland Mitigation includes submittal of a Farmland Mitigation Plan as part of the development application. The Farmland Mitigation Plan is required to include Mitigation Lands protected by a Farmland Conservation Easement, Farmland Deed Restriction, or by a Qualifying Conservation Entity purchased using In-Lieu Fees. If the applicant

[4] While the HDR (High Density Residential), Heavy Commercial, and Light Commercial zones allow for the cultivation of Christmas trees, opportunity sites currently in these zones would not be impacted by rezoning to HDR/20 under implementation of the project because sites zoned HDR/20 would also allow for the cultivation of Christmas trees.

is unable to procure Mitigation Lands, an In-lieu Fee or "Alternative and Complementary Mitigation" is required instead.

Implementation of the HEU6 would rezone opportunity sites to HDR; therefore, future residential development projects at these sites would not trigger the requirement for a Farmland Mitigation Plan in accordance with Chapter 21.92 of the County Code. Additionally, without project-specific details, it would be speculative for the County to prepare Farmland Mitigation Plans for every opportunity site where agriculturally zoned sites are rezoned to a non-agricultural zone. Therefore, the project's impact related to conflict with zoning for agricultural uses is considered potentially significant without mitigation.

MM-AG-OBJ-1 and MM-AG-CONS-2 would require agriculturally zoned sites (Opportunity Sites 1 and 2) to prepare a Farmland Mitigation Plan in accordance with the purpose and intent of Chapter 21.92 of the County Code. MM-AG-OBJ-1 would apply for by-right housing developments streamlining under the Objective Process, and MM-AG-CONS-2 would apply for discretionary developments streamlining under the Consistency Process of the HEU6. Therefore, with implementation of MM-AG-OBJ-1 and MM-AG-CONS-2, future residential development projects on opportunity sites that are currently zoned for agricultural uses would be required to prepare and submit a Farmland Mitigation Plan as part of the development application.

Opportunity Sites that are currently adjacent to agricultural lands include Sites 1 through 5, 11 through 15, 24 through 26, 32, 48, and 50. Residential development on these opportunity sites could result in compatibility issues with the adjacent agricultural uses. There are several applicable County policies and regulations that require agricultural buffers to protect agriculture from impacts of new residential or other incompatible development and mitigate against the effects of agricultural operations on the residential development, such as Policy AG-1.2 in the Agriculture Element of the 2010 General Plan and Section 21.66.030(F)(2) of the County Code. In the North County Land Use Plan area, new development adjacent to agricultural areas (e.g., Site 48) would be subject to compliance with Section 20.144.080(D)(6) of the Coastal Implementation Plan. There are no opportunity sites located in the coastal Carmel Area Land Use Plan Area that are adjacent to agricultural uses.

To enforce agricultural buffer requirements, MM-AG-OBJ-5 would require all Objective Process housing projects adjacent to agricultural areas to establish a well-defined buffer zone in the area to be developed, consistent with Section 21.66.030 of the County Code or Section 20.144.080(D)(6) of the Coastal Implementation Plan. MM-AG-CONS-6 would similarly require all Consistency Process housing projects on opportunity sites adjacent to agricultural areas to establish a well-defined buffer zone in the area to be developed, consistent with Section 21.66.030 of the County Code, Section 20.144.080(D)(6) of the Coastal Implementation Plan, or Policy AG-1.2 in the Agriculture Element of the 2010 General Plan. The split zoning strategy as part of the

HEU6 would consider buffer/easement requirements to strategically rezone portions of the opportunity sites outside required buffer areas.

MM-AG-OBJ-1 and MM-AG-CONS-2 would reduce potential impacts to agricultural uses by protecting other existing agricultural operations in Monterey County. MM-AG-OBJ-5 and MM-AG-CONS-6 would protect agriculture from impacts of new residential or other incompatible development and mitigate against the effects of agricultural operations on the residential development. However, for those opportunity sites with agricultural uses (refer to Table 4.2-1), MM-AG-OBJ-1 and MM-AG-CONS-2 would not replace the agricultural uses and would, therefore, not mitigate the impact to below a level of significance. Therefore, this impact would remain significant and unavoidable.

As such, the permanent conversion of agriculturally zoned land in the UMC would result in a significant and unavoidable impact.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-AG-OBJ-1 and MM-AG-CONS-2 would apply.

Additionally, compliance with Section 21.66.030 of the County Code, Section 20.144.080(D)(6) of the Coastal Implementation Plan, or Policy AG-1.2 in the Agriculture Element of the 2010 General Plan will be required through MM-AG-OBJ-5 and MM-AG-CONS-6 below.

**MM-AG-OBJ-5:** Future residential developments that process by-right on opportunity sites that are adjacent to agricultural areas would be required to establish a well-defined buffer zone in the area to be developed, consistent with Section 21.66.030 of the Monterey County Code (or Section 20.144.080(D)(6) of the Coastal Implementation Plan for Site 48 in the North County Land Use Plan Area). The buffer zone(s) shall be shown on project plans. The area to be used as a buffer shall be placed in an easement, required as a condition of project approval.

**Projects on Inland Opportunity Sites.** Residential development projects on inland opportunity sites shall comply with the following requirements under Section 21.66.030 of the Monterey County Code:

New development adjacent to agricultural areas shall be required to establish a well-defined buffer zone in the area to be developed. The area to be used as a buffer shall be

placed in an easement, required as a condition of project approval. Requirements for the easement are as follows:

a. The easement width shall be sufficient to protect agriculture from impacts of new residential or other incompatible development and to mitigate against the effects of agricultural operations on the proposed uses. For development adjacent to "F," "PG," or "RG" Zoning Districts, the easement shall be a width of two hundred (200) feet, or wider where necessary to mitigate adverse impacts between agricultural and adjacent land uses. In all other zoning districts, the easement may be reduced to a width of not less than fifty (50) feet.
b. The easement shall extend the full length of the boundaries between the property to be developed and adjacent agricultural lands. Permanent roads which have been established by a dedicated road easement, or which have been paved, or which are a public road, may serve as part of this easement.
c. Land in the easement may not be used for recreational areas as part of housing projects or public facilities. Minor storage structures or sheds associated with the residential uses may be permitted in the easement area. Specific permitted and prohibited uses shall be stipulated in the easement document.

**Projects on Opportunity Sites in the North County Land Use Plan Area.** Residential development projects in the North County Land Use Plan Area shall comply with the following requirements under Section 20.144.080(D)(6) of the Coastal Implementation Plan:

New development adjacent to agricultural areas shall be required to establish a well-defined buffer zone within the areas to be developed. The area to be utilized as a buffer shall be placed in open space easement, required as a condition of project approval. Requirements for the easement are as follows:

a. The easement width shall be sufficient to protect agriculture from impacts of new residential or other incompatible development and to mitigate against the effects of agricultural operations on the proposed uses. As such, for development adjacent to "CAP" (Coastal Agricultural Preservation) and "AC" (Agricultural Conservation) zoning districts, the easement shall be a width of 200 feet, or wider where necessary to mitigate adverse impacts between agricultural and adjacent land uses. In all other zoning districts, the easement may be reduced to a width of not less than 50 feet. In order to assure that the approved width is sufficient, the applicant may be required to provide a determination of the easement width necessary to mitigate impacts between the proposed development and adjacent lands. The determination shall be prepared by a consultant selected from the County list of Agricultural Viability report Consultants, at the applicant's expense, and may be subject to third party review to assure adequacy.

b. The easement shall extend the full length of the boundaries between the property to be developed and adjacent agricultural lands. Permanent roads which have been established by a dedicated road easement, or which have been paved, or which are a public road, may serve as part of this easement.
c. Land within the easement shall be maintained in open space and may not be used for recreational areas as part of housing projects or public facilities. Minor storage buildings or shed associated with the residential uses may be permitted within the easement area. Specific permitted and prohibited uses shall be stipulated in the easement document.

**MM-AG-CONS-6:** Future residential developments that are adjacent to agricultural areas would be required to establish a well-defined buffer zone in the area to be developed, consistent with Section 21.66.030 of the Monterey County Code (or Section 20.144.080(D)(6) of the Coastal Implementation Plan for Site 48 in the North County Land Use Plan Area). If compliance with Section 21.66.030 of the Monterey County Code is not feasible, future residential developments that are adjacent to agricultural areas shall comply with Policy AG-1.2 in the Agriculture Element of the 2010 General Plan.

Refer to MM-AG-OBJ-5, above, for the list of requirements under Section 21.66.030 of the Monterey County Code and Section 20.144.080(D)(6) of the Coastal Implementation Plan.

Residential development projects on inland opportunity sites that cannot feasibly comply with Section 21.66.030 of the Monterey County Code shall comply with the following requirements under Policy AG-1.2 in the Agriculture Element of the 2010 General Plan:

The County shall require that well-defined buffer areas be provided as partial mitigation for new non-agricultural development proposals that are located adjacent to agricultural land uses on farm lands designated as Prime, of Statewide Importance, Unique, or Local Importance.

a. Criteria. The following criteria shall be used to establish agricultural buffers to protect current and reasonably foreseeable future agricultural operations:
    1. The type of non-agricultural use proposed, site conditions and anticipated agricultural practices.
    2. Weather patterns, crop type, machinery and pesticide use, existence of topographical features, trees and shrubs, and possible development of landscape berms to separate the nonagricultural use from the existing agricultural use.

b. Buffers. Buffers and/or easements shall be:
    1. Designed to comply with applicable state and local laws regulating school buffers, pesticide buffers, and other controls.
    2. Provided on the land designated for the proposed new use and not on the adjacent agricultural land unless by mutual agreement between the two landowners. Buffer maintenance will be the responsibility of the underlying fee title owner and shall be enforceable by the County of Monterey.
    3. Designed to be used for the purposes and manner described in this policy and for no other purposes unless agreed to by abutting landowners. Drainage, shading, vegetation, and erosion control shall be made beneficial to the adjacent agricultural use.

In circumstances in which a buffer is not meant to be permanent, it will be terminated once the underlying agricultural purpose for the buffer no longer exists. The Agricultural Advisory Committee shall review and make recommendations on establishment of, and changes to, buffer zones.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

### 4.2.5.3 Thresholds 3 and 4: Conflict with Zoning for Forest or Timberland and Loss or Conversion of Forest Land to Non-Forest Use

**Threshold 3:** Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**Threshold 4:** Would the project result in the loss of forest land or conversion of forest land to non-forest use?

### Impact Analysis

As described in Section 4.2.2.5, there are several opportunity sites that could be considered forest land and/or timberland as defined by PRC Section 12220(g), and PRC Section 4526, respectively. For instance, there are 11 opportunity sites (Opportunity Sites 8, 10, 16, 22, 40, 43, 45, 46, 48, 52, and 56) that support at least 10 percent of forest or woodland vegetative cover and have zoning designations that allow for tree farming, the cultivation of Christmas trees, or other management of forest resources, meaning they could be considered forest land. Additionally, sites with undeveloped land and current zoning designations that allow for tree farming or the cultivation of Christmas trees, which constitute the majority of opportunity sites (except Sites 11 through 15, 24, 30, 35, 41, 51, and 53 through 55), could be considered timberland.

Of the 11 opportunity sites that could be considered forest land, eight (Sites 8, 16, 22, 40, 43, 45, 48, and 56) are currently zoned for residential land uses, and one (Site 10) is zoned for commercial uses. Additionally, Sites 40 and 45 are also zoned for Urban Reserve to ensure the effective provision of urban services. The project proposes to rezone opportunity sites as HDR. While the HDR zoning designation would continue to allow for the cultivation of Christmas trees on the opportunity sites, the rezoning effort would be implemented to facilitate residential development that will help the County meet their state-required RHNA for the HEU6. However, the residential, commercial, and Urban Reserve zoning designations indicate that Sites 8, 16, 22, 40, 43, 45, 48, and 56 are already contemplated for development. Therefore, the rezoning of these sites to HDR under the project would not conflict with forest land zoning, and potential impacts to these sites would be less than significant.

Similarly, the majority of sites that could be considered timberland are currently zoned for residential, commercial, and industrial uses. While these zones allow for tree farming or the cultivation of Christmas trees, the zoning designations indicate that these sites are already contemplated for development, and they are intended to be developed with residential, commercial, and industrial uses. Therefore, the rezoning of these sites to HDR under the project would not conflict with timberland zoning, and potential impacts to these sites would be less than significant.

The rezone of opportunity sites that are currently zoned PQP (intended to allow for public uses, such as schools, parks, regional parks, recreation areas, and other uses for the public) or Resource Conservation (intended to allow development in remote areas while protecting resources in those areas) could result in potentially significant impacts to forest land and timberland resources. Opportunity Sites 4, 9, 25, 31, 38, 46, and 47 are zoned as PQP, and Site 52 is zoned for Resource Conservation. The total combined area of these sites that would be rezoned under the project is 183.73 acres. As described in Section 4.2.2.5, the forest and woodland vegetation cover in the entire UMC is approximately 481,188.49 acres. Therefore, the total combined area of sites that would be rezoned from PQP or Resource Conservation under the project would represent approximately 0.0004 percent of the total forested area in the UMC. While this is a very small percentage of the total land area zoned to allow for forest land, this impact would be significant because the potential forest land would be permanently removed from buildout of the HEU6.

However, while the PQP and Resource Conversation zones allow for forested land, the land in these zones is not necessarily covered by forest vegetation. Further, implementation of the HEU6 requires rezoning in order for the County to meet their state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031.

Vegetative cover mapping from the County's GIS identifies a total of 100.98 acres of mixed conifer forest and oak woodland vegetative cover in the project area (refer to Section 4.4). Due to development constraints, required buffers, and design standards, future development under the

project would not remove 100 percent of existing trees on opportunity sites; nevertheless, this analysis conservatively assumes the loss or conversion of up to 100.98 acres of potential forest land. This represents approximately 17 percent of the total acreage of opportunity sites in the project area (585.58 acres). Further, this represents approximately 0.0002 percent of the total forested area in the UMC (481,188.49 acres). While this is a very small percentage of the total forested land area in the UMC, this impact would be significant because the forest land would be permanently removed from buildout of the HEU6.

As previously described, the opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and already identified growth areas, and to avoid sprawl or haphazard development. Additionally, the proposed rezone of opportunity sites and potential loss or conversion of forest land to non-forest use is necessary for implementation of the HEU6 and for the County to meet their state-required RHNA.

To mitigate the impact to forest land from buildout of the HEU6, such mitigation would need to involve rezoning of UMC land to allow for forest management activities and conservation or conversion of other viable forest land elsewhere in the UMC. MM-BIO-OBJ-1 requires a biological survey to determine the presence of sensitive vegetation communities (including but not limited to mixed conifer forest and woodland vegetation communities) on opportunity sites in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Any direct impacts to sensitive vegetation communities require mitigation to comply with California Department of Fish and Wildlife (CDFW) authorizations and a minimum 1:1 ratio of mitigation under MM-BIO-CONS-5. Compensatory mitigation must be satisfied through the acquisition of mitigation bank credits within the site's specific watershed or by acquisition of other off-site mitigation credits to be identified and selected in coordination with CDFW. If credits are not available at a resource agency-approved mitigation site within the site's specific watershed or through other off-site mitigation credits, MM-BIO-CONS-5 requires implementation of habitat creation, restoration, enhancement, or preservation. Therefore, MM-BIO-CONS-5 would apply partial mitigation to impacts from the loss or conversion of forest land in UMC by conserving or restoring other viable forest land. However, mitigating the loss of a biological habitat does not inherently replace the lost timber production, forest zoning, or physical forest canopy evaluated herein. As such, this mitigation would not fully mitigate impacts to forest and timberland identified above, because the conserved forest vegetation communities would not be rezoned to allow for forest management or timber production activities. It is unlikely there is enough viable forest land in the UMC that can regain the acreage lost to new housing developments. The County does not have the jurisdiction to conserve or plant native trees in the state or federal lands in Monterey County. Further, there is currently no program that is established to allow for mitigation of forest land through conservation or conversion, and it would not be feasible to ensure the long-term success of new tree plantings, especially where the County has no

regulatory control. The only way to fully avoid the potential impacts on forest or timberland resources would be to eliminate sites currently zoned for forest land or covered with forest vegetation. However, doing so would substantially reduce the flexibility for County decision-makers to meet regional housing needs and specific affordability targets, as required under state law. Therefore, no mitigation measures to reduce the project's impact on forest resources are feasible. The permanent conversion of forest land and timberland in the UMC would result in a significant and unavoidable impact.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

No mitigation measures are feasible.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.2.5.4 Threshold 5: Other Changes Resulting in Conversion of Farmland or Forest Land

**Threshold 5:** Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.?

### Impact Analysis

Project implementation would not result in other changes to the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The project would result in rezoning of the proposed opportunity sites only. The potential for impacts of the project on conversion of farmland to non-agricultural use or conversion of forest land to non-forest use are fully described in Section 4.2.5.1 through Section 4.2.5.3 of this PEIR. Therefore, no impact related to other changes to the existing environment, which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, would occur.

### Significance of Impact

No impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

No impact.

## 4.2.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to agricultural resources that could result due to the implementation of the project. The study area for consideration of cumulative impacts on farmland is the State of California.

### 4.2.6.1 Cumulative Threshold 1: Conversion of Farmland to Non-Agricultural Use

The loss of land in agricultural production has long been a concern throughout California, and approximately 47,000 acres of agricultural land are removed from production every year (DOC 2025d). While the conversion of farmland in the UMC has been gradual, continued development is likely and will result in further loss. Therefore, a cumulative impact related to the conversion of farmland to non-agricultural uses exists. The project would permanently remove 165 acres of Important Farmland from the potential for agricultural production; therefore, this represents a considerable contribution to a cumulative impact. MM-AG-OBJ-1 and MM-AG-CONS-2 would apply partial mitigation to project-related impacts by requiring Farmland Mitigation Plans for residential development on lands zoned for agriculture. Additionally, MM-AG-OBJ-3 and MM-AG-CONS-4 would require preparation of a LESA report for developments on opportunity sites with existing agricultural operations or land mapped as Important Farmland and would require preparation of a Farmland Mitigation Plan for development that is determined by the LESA report to result in significant impacts on agricultural resources. However, these mitigations would not apply to cumulative projects outside the HEU6 opportunity sites and would not replace agricultural operations that would be eliminated by development on opportunity sites with existing agricultural uses (refer to Table 4.2-1). Therefore, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, and MM-AG-CONS-4 would not mitigate the impact to below a level of significance. It is possible that cumulative projects in the UMC and other jurisdictions, such as the City of Salinas, would also remove active agricultural uses from production and may not be able to replace this loss. Therefore, this cumulative impact would remain significant and unavoidable.

However, as previously described, the County considered sites in priority planning areas and based on proximity to existing urban development and public services and utilities when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands. This allows for large contiguous tracts of agricultural lands to stay intact, which is important for scaling and the viability of the agricultural industry. This consideration also minimizes the fragmentation and development encroachment on agricultural lands, while still meeting the state-required RHNA for the HEU6. Cumulative projects affecting Farmland (as defined in Chapter 21.92 of the County Code) in agricultural zones would be required to comply with Farmland

Mitigation Plan requirements in that chapter of the County Code, if in UMC. Additionally, development adjacent to agricultural areas would be required to comply with the agricultural buffer requirements in Section 21.66.030 of the County Code, if the criteria defined therein is met.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, and MM-AG-CONS-4 would apply.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.2.6.2 Cumulative Threshold 2: Conflict with Zoning for Agricultural Use or Williamson Act Contract

No lands under Williamson Act Contract would be rezoned as a result of the project; therefore, there is no potential for the project to contribute to a cumulative impact.

Development conflicting with zoning for agricultural use is closely related to conversion of agricultural land, as rezoning usually precedes the conversion. As discussed above, the project would rezone approximately 106 acres zoned for agricultural uses. There are also two opportunity sites (Sites 5 and 6) that are currently zoned MDR/4-A-UR with the Limited Agricultural overlay district that total 5.58 acres. While this is a small percentage of the total land zoned for agricultural uses in Monterey County, this contribution to the cumulative impact would be considerable because the land would be permanently removed from production. MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-5, and MM-AG-CONS-6 would apply partial mitigation to project-related impacts. However, these mitigations would not apply to cumulative projects and would not replace the agricultural operations that would be eliminated by development on opportunity sites with existing agricultural uses (refer to Table 4.2-1). Therefore, MM-AG-OBJ-1 and MM-AG-CONS-2 would not mitigate the impact to below a level of significance. It is possible that cumulative projects in the UMC and other jurisdictions, such as the City of Salinas, would also remove active agricultural uses from production and may not be able to replace this loss. Therefore, this cumulative impact would remain significant and unavoidable.

However, as previously described, the opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands. This allows for large contiguous tracts of agricultural lands to stay intact, which is important for scaling and the viability of the agricultural industry. This consideration also minimizes the fragmentation and development encroachment on

agricultural lands, while still meeting the state-required RHNA for the HEU6. Cumulative projects affecting Farmland (as defined in Chapter 21.92 of the County Code) in agricultural zones would be required to comply with Farmland Mitigation Plan requirements in that chapter of the County Code. Additionally, development adjacent to agricultural areas would be required to comply with the agricultural buffer requirements in Section 21.66.030 of the County Code, if the criteria defined therein is met.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-5, and MM-AG-CONS-6 would apply.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.2.6.3 Cumulative Thresholds 3 and 4: Conflict with Zoning for Forest or Timberland and Loss or Conversion of Forest Land to Non-Forest Use

As described in Section 4.2.5.3, the project would result in a significant impact regarding forest lands and timberland. Cumulative development projects and land use plans in and near Monterey County may also contribute to substantial impacts on forest resources in a manner similar to the HEU6 through the expansion of urban uses into areas of forested land. The combination of the direct impacts from individual projects and adopted plans would result in significant cumulative impacts on forest resources. Because cumulative impacts on forest resources would be significant, and because the project's impact on forest resources would be significant, the project's impact on forest resources is also cumulatively considerable. However, as previously described, the opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and already identified growth areas, and to avoid sprawl or haphazard development. This minimizes the fragmentation and development encroachment on forested lands, while still meeting the state-required RHNA for the HEU6.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

No mitigation measures are feasible.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.2.6.4 Cumulative Threshold 5: Other Changes Resulting in Conversion of Farmland or Forest Land

As previously described, project implementation would not result in other changes to the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The County considered sites in priority planning areas and based on proximity to existing urban development and public services and utilities when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands. As such, the project meets the state-required RHNA for the HEU6 while allowing for large contiguous tracts of agricultural lands and forested lands to stay intact and minimizing the fragmentation and development encroachment on agricultural and forest lands. Therefore, the project would not contribute to a cumulatively considerable impact related to other changes to the existing environment, which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

### Significance of Impact

No impact.

### Mitigation Measures

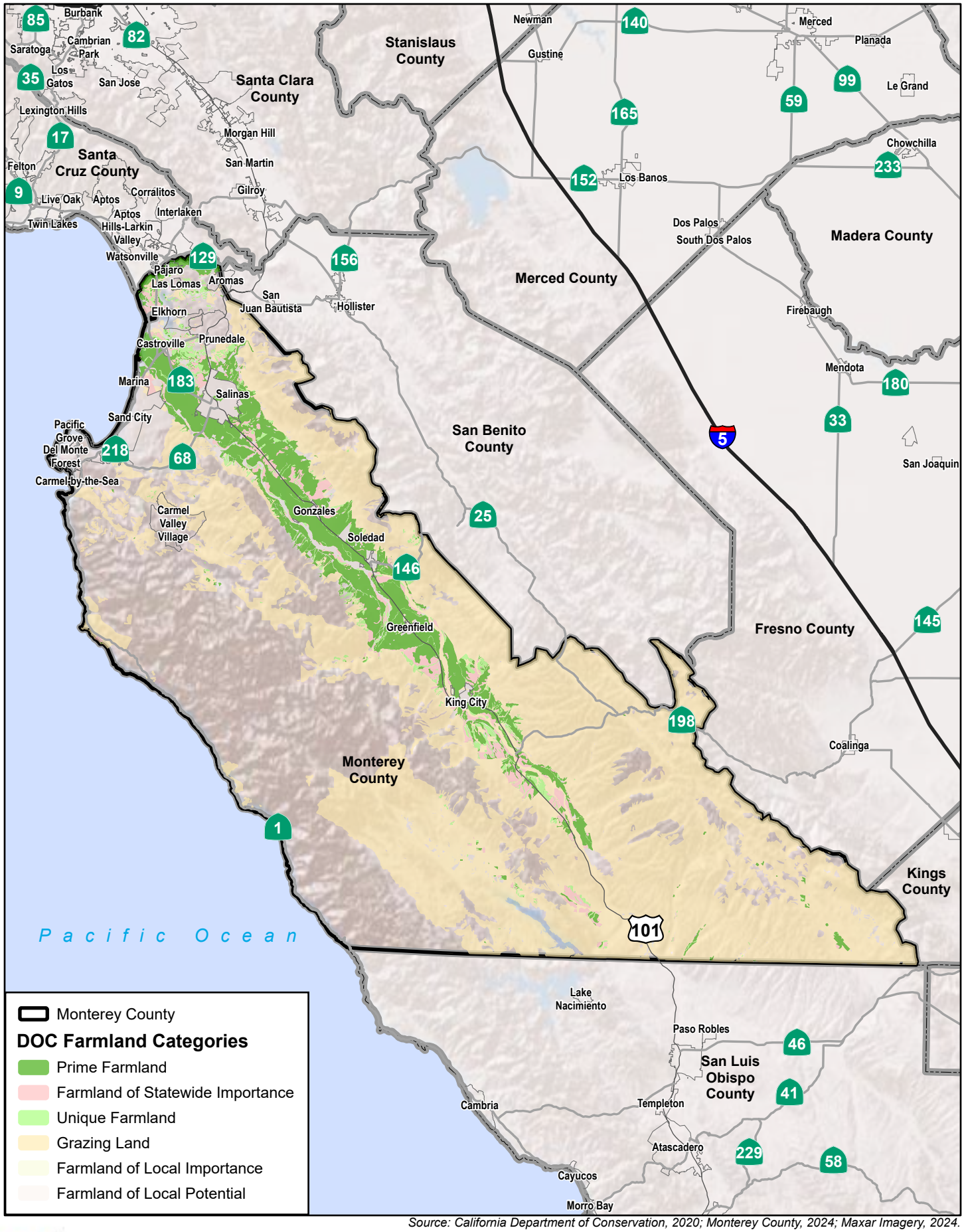
No mitigation measures are required.

### Significance of Impact After Mitigation

No impact.

## 4.2.7 Conclusion

The project would result in significant and unavoidable impacts and considerable contributions to cumulative impacts related to conversion of Important Farmland and agriculturally zoned land to non-agricultural uses. Partial mitigation measures applied to the project, including requirements for a Farmland Mitigation Plan, LESA report, and agricultural buffers, would not reduce the project's impacts to agricultural resources to a less than significant level. Therefore, impacts related to conversion of Important Farmland and agriculturally zoned land to non-agricultural uses would be significant and unavoidable. The project would also result in significant and unavoidable impacts and considerable contributions to cumulative impacts related to conflict with zoning for and conversion of forest land and timberland. While MM-BIO-CONS-5 would provide partial mitigation related to conservation or restoration of forest vegetation communities, there are no feasible mitigation measures to reduce this significant and unavoidable impact.




Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.

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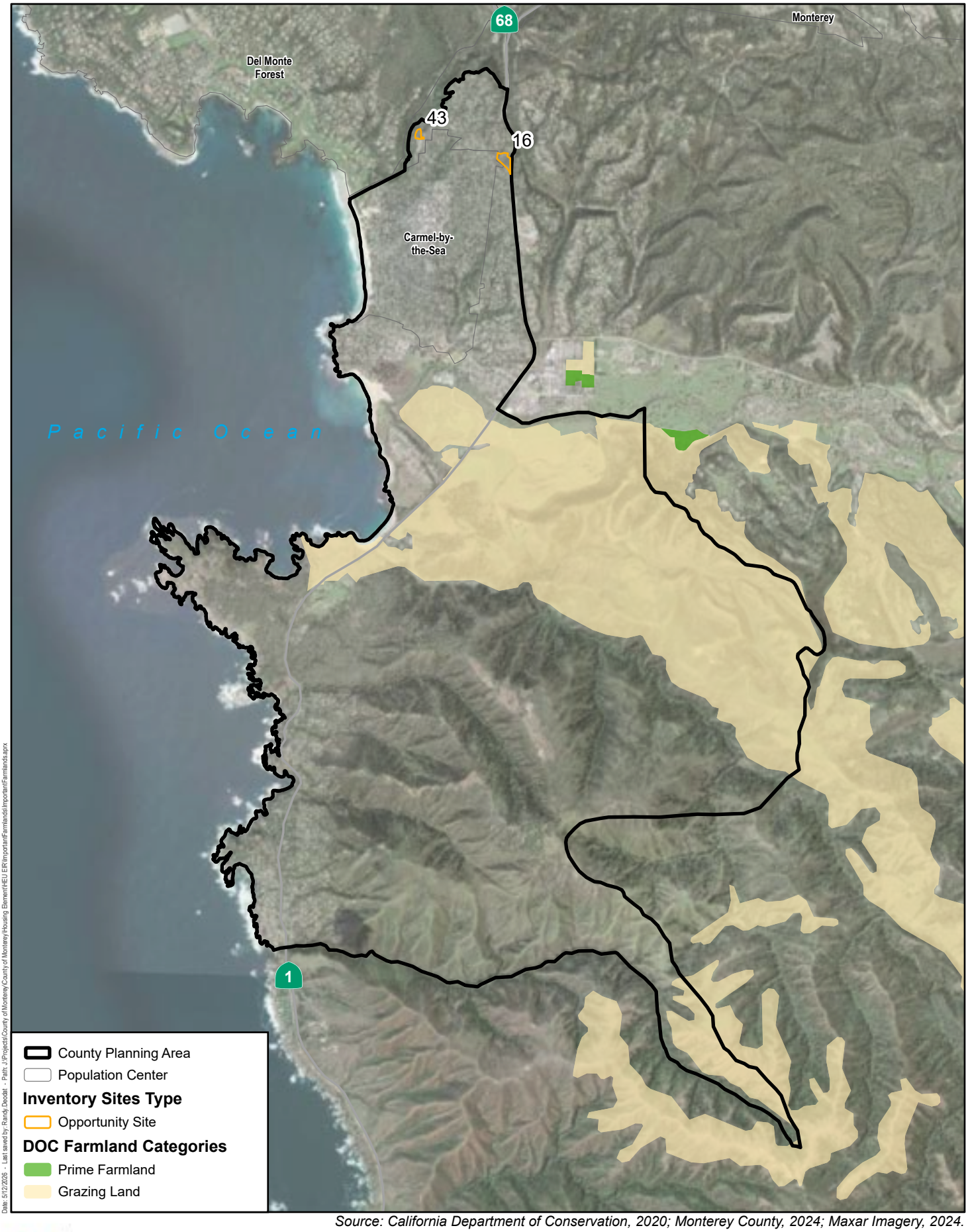
**Figure 4.2-1**

Important Farmlands in Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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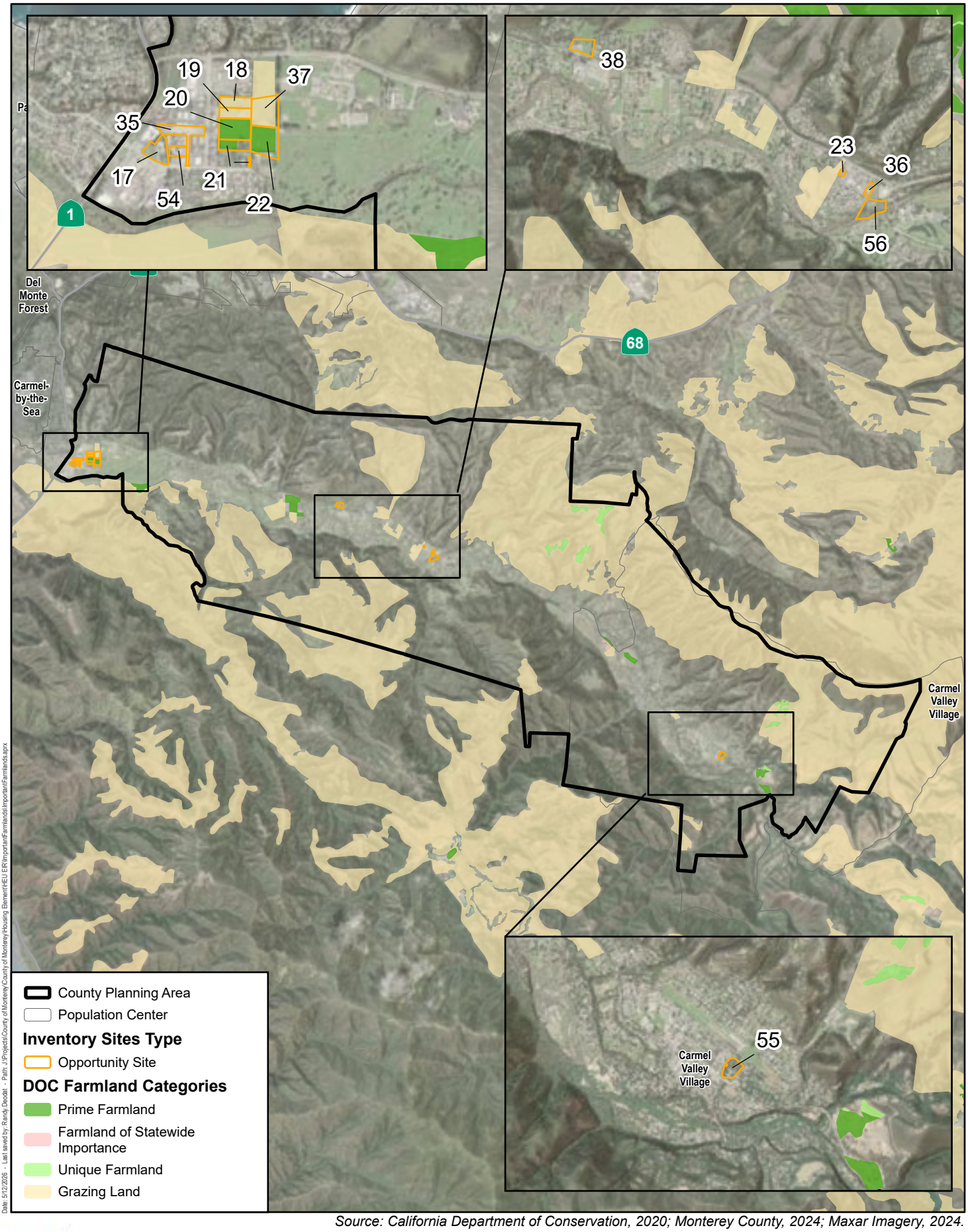
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**Figure 4.2-1a**

Important Farmlands in Carmel Area Land Use Plan

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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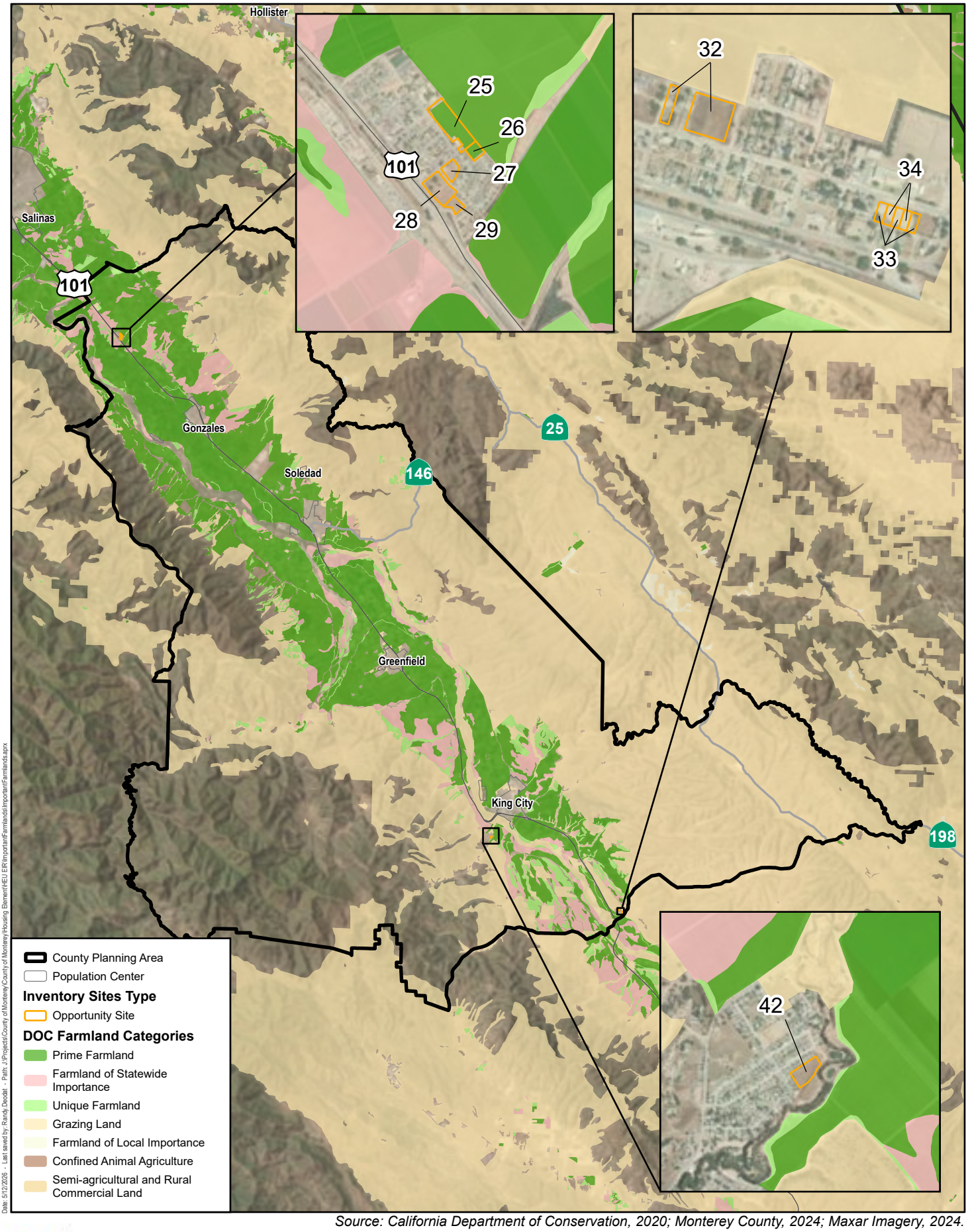
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**Figure 4.2-1b**

Important Farmlands in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

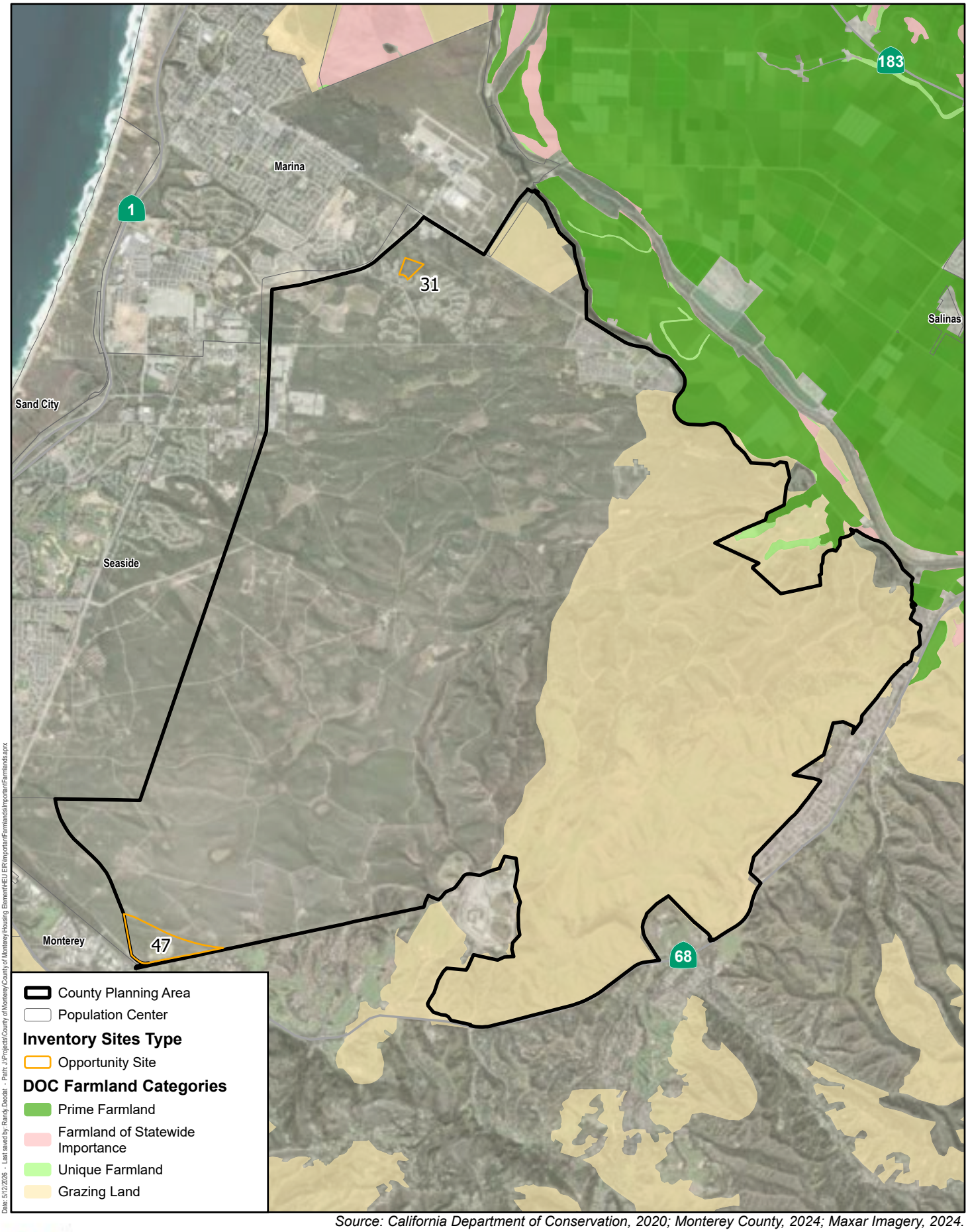
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**Figure 4.2-1c**

Important Farmlands in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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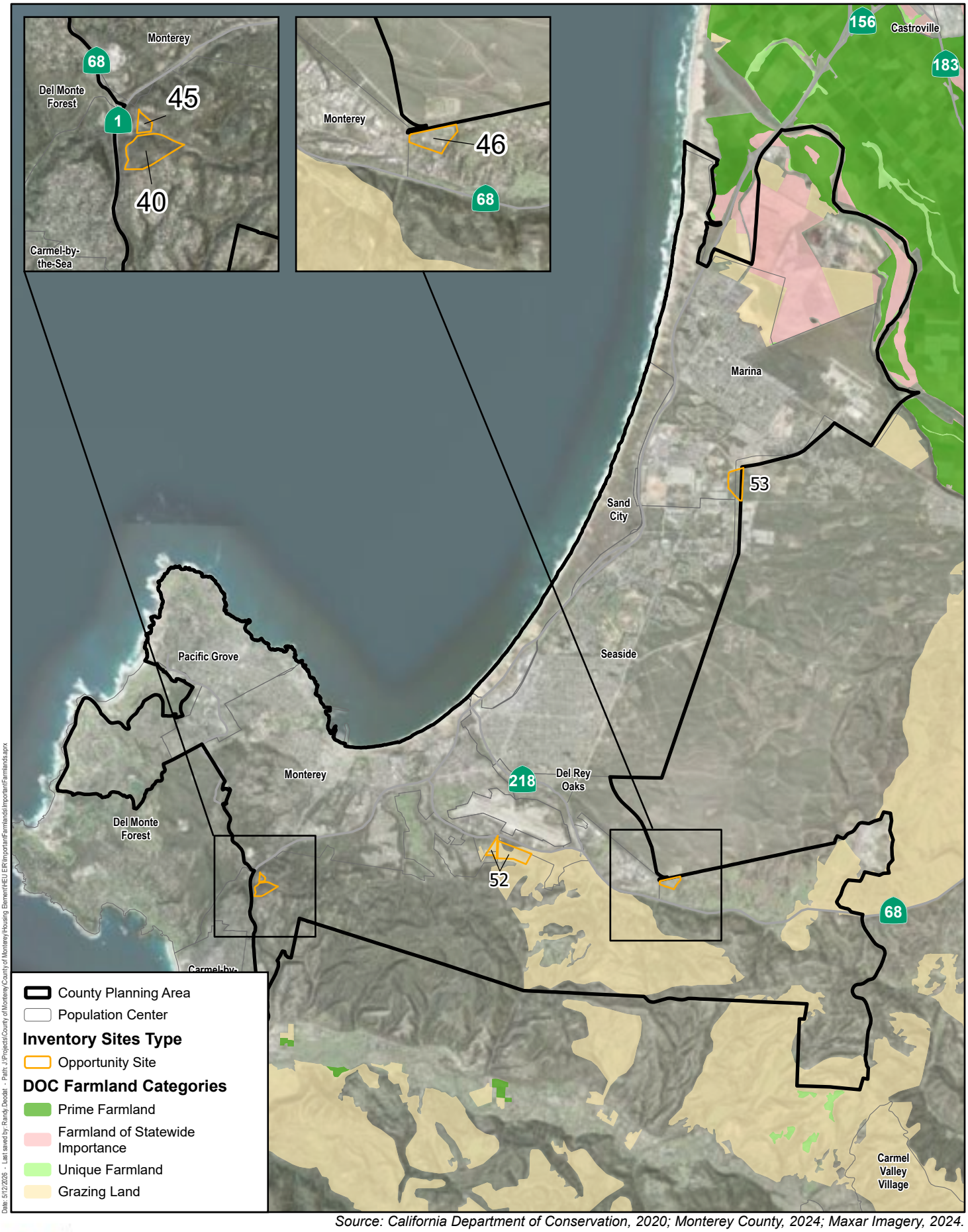
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**Figure 4.2-1d**

Important Farmlands in Fort Ord Master Plan

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Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.

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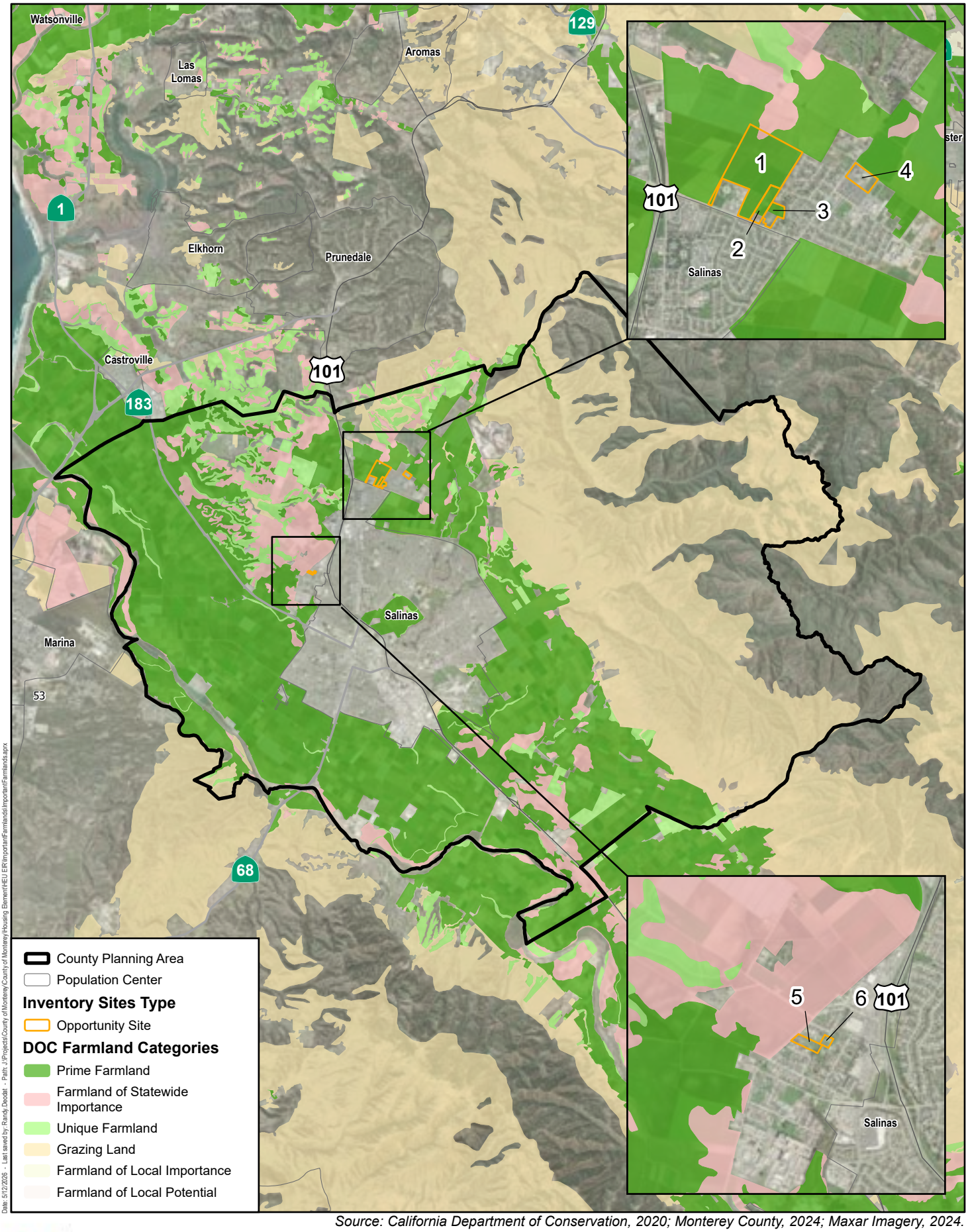
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**Figure 4.2-1e**

Important Farmlands in Greater Monterey Peninsula Area Plan

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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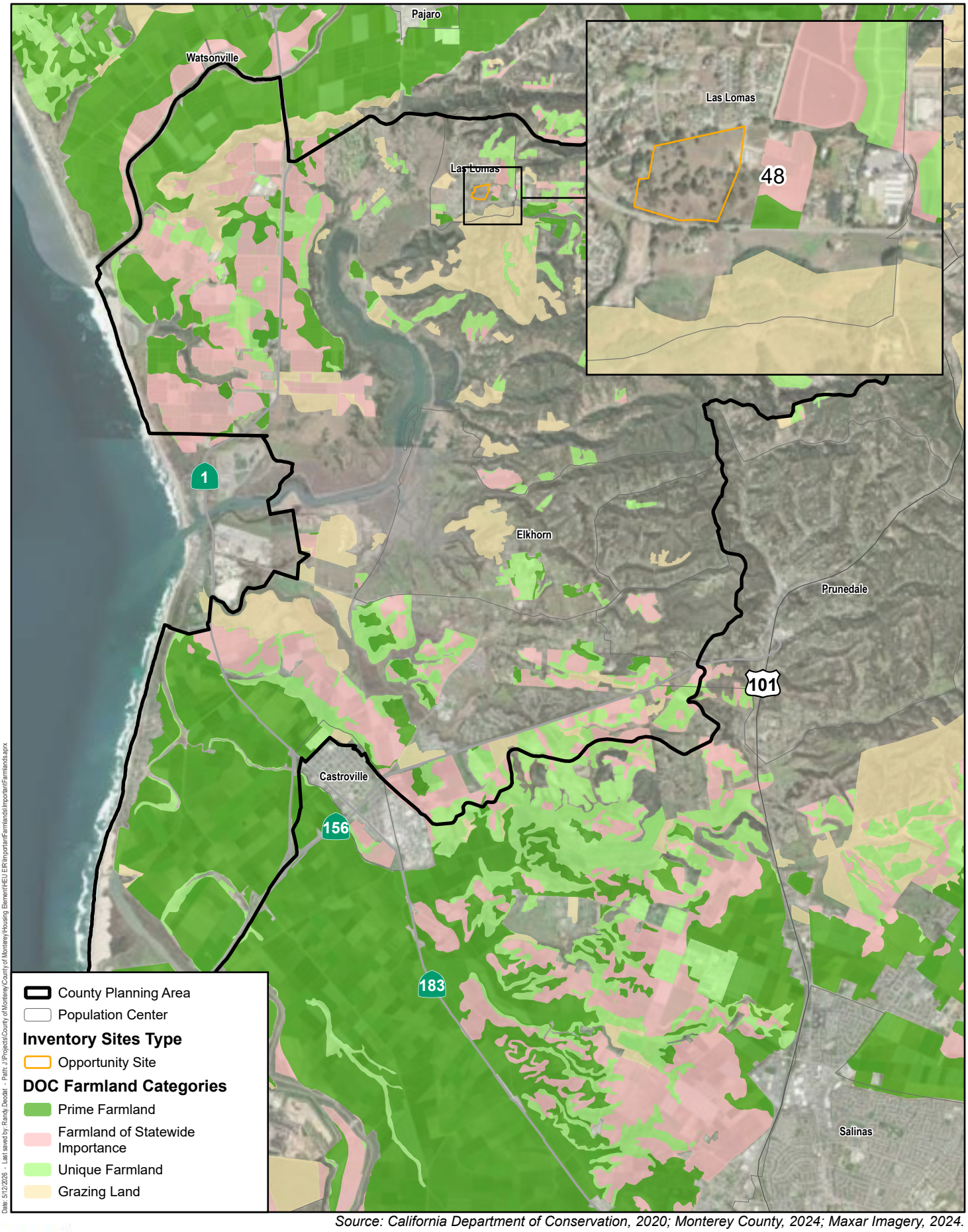
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**Figure 4.2-1f**

Important Farmlands in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

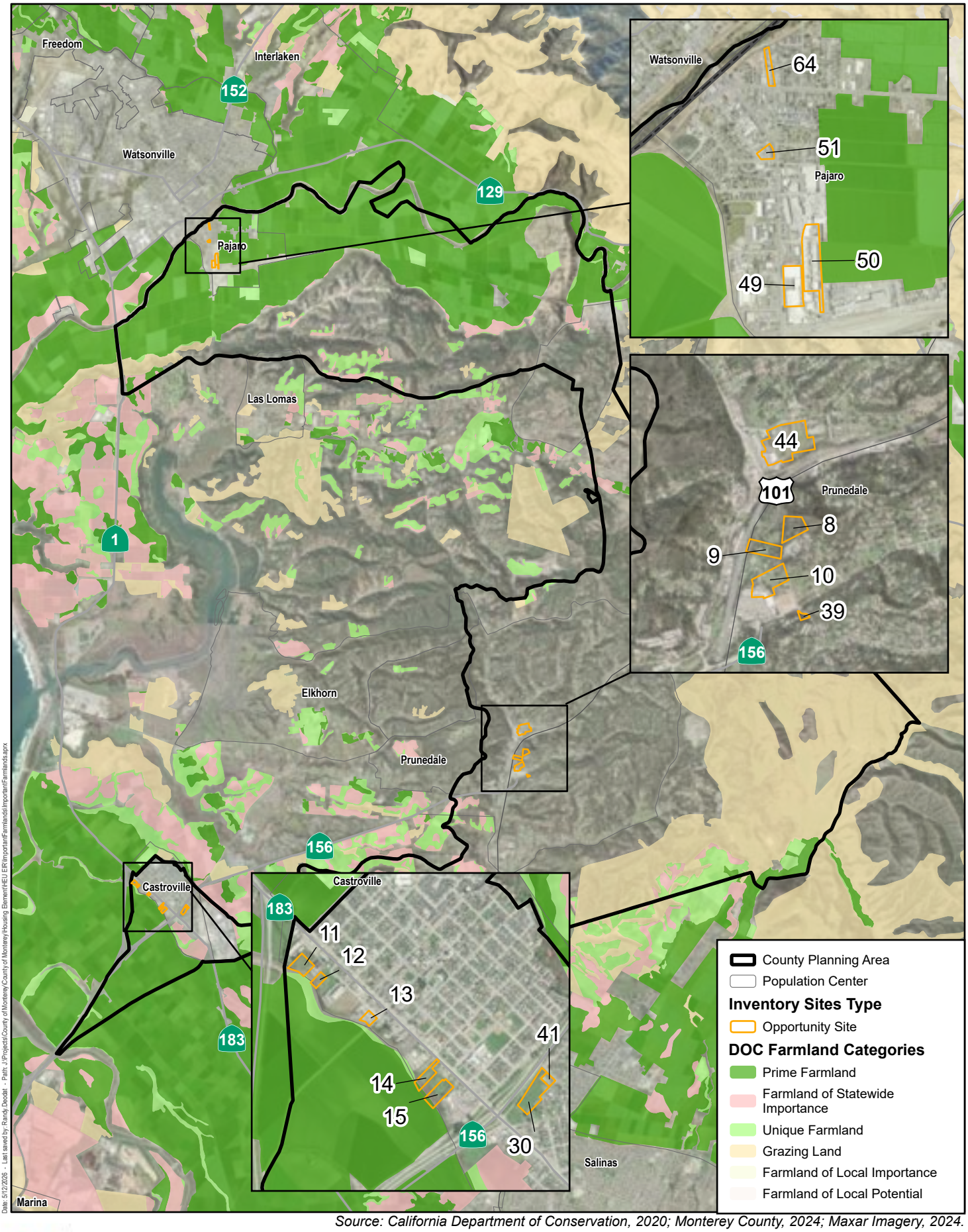
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**Figure 4.2-1g**

Important Farmlands in North County Coastal Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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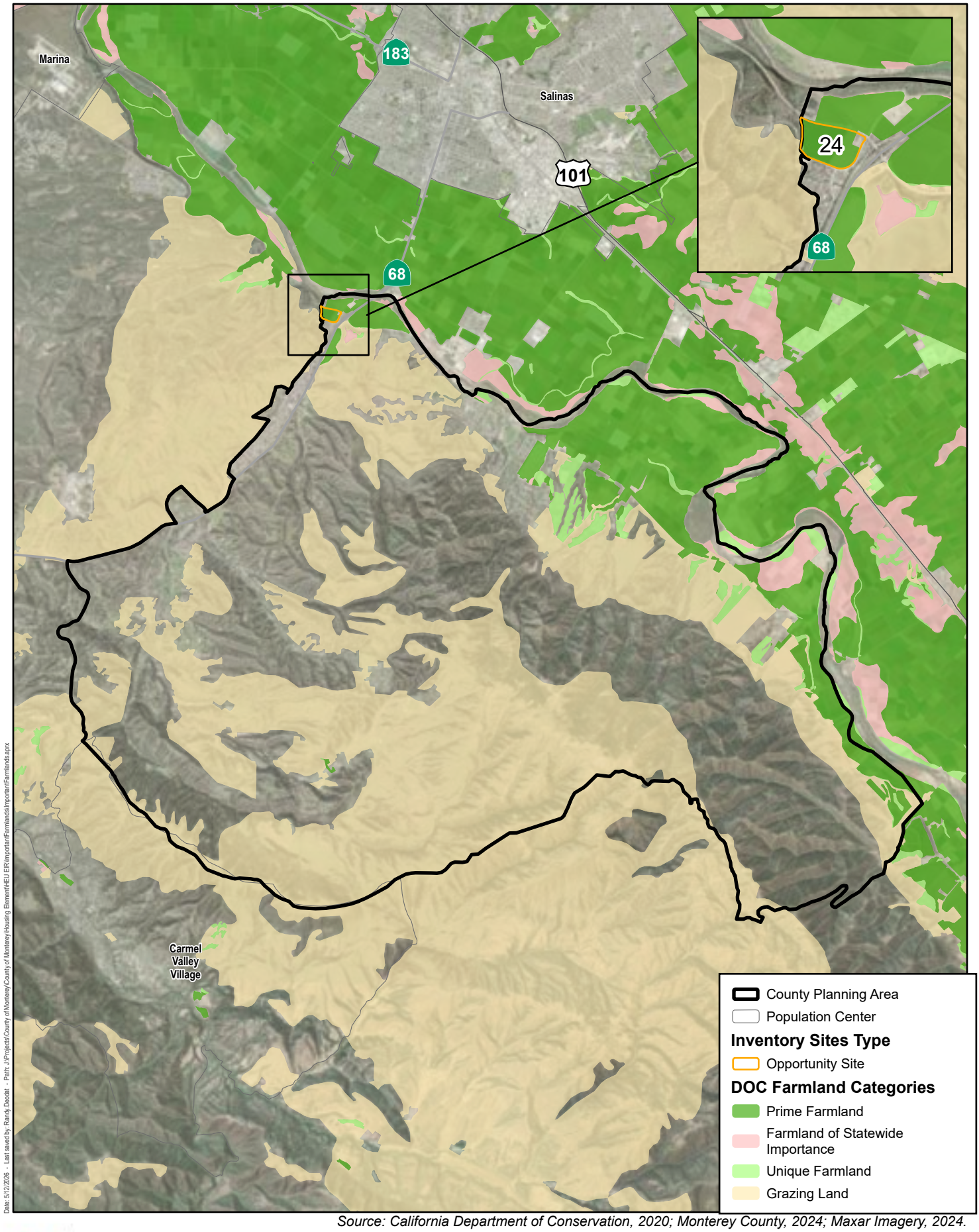
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**Figure 4.2-1h**

Important Farmlands in North County Inland Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: California Department of Conservation, 2020; Monterey County, 2024; Maxar Imagery, 2024.*

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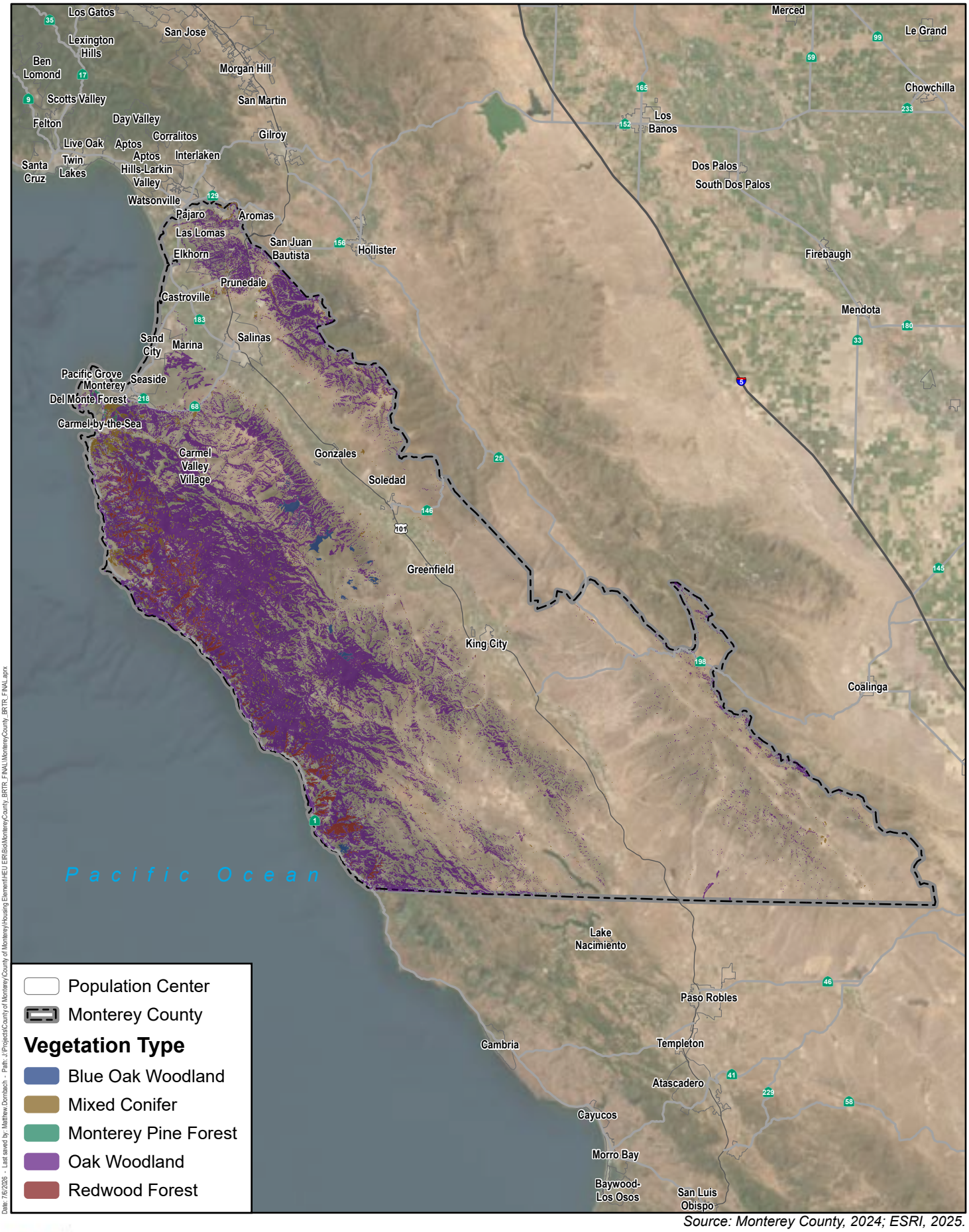
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**Figure 4.2-1i**

Important Farmlands in Toro Area Plan

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*Source: Monterey County, 2024; ESRI, 2025.*

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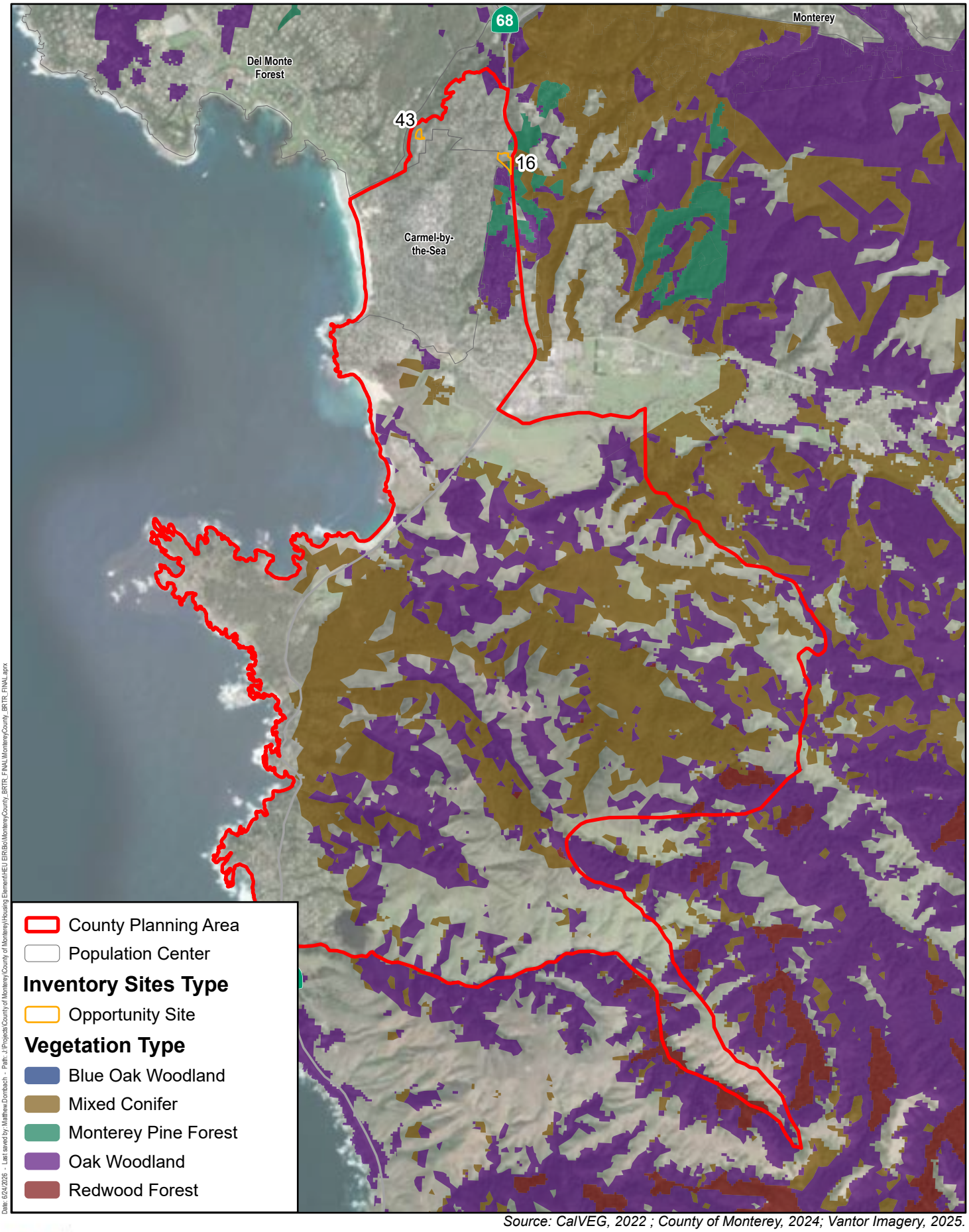
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**Figure 4.2-2**

Forest Vegetation Types in Unincorporated Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

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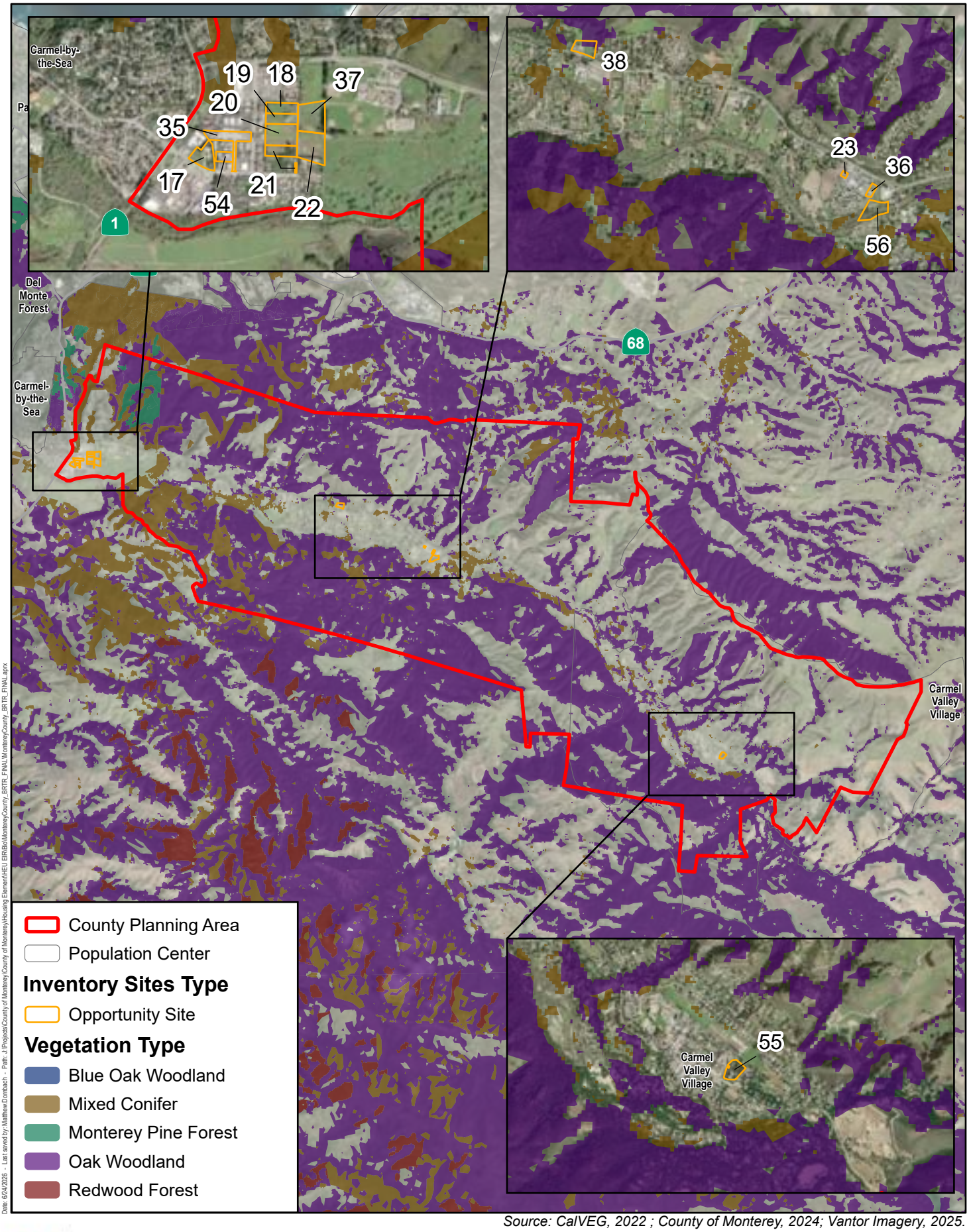
**Figure 4.4-2a**

Forest Vegetation Types in Carmel Area Land Use Plan



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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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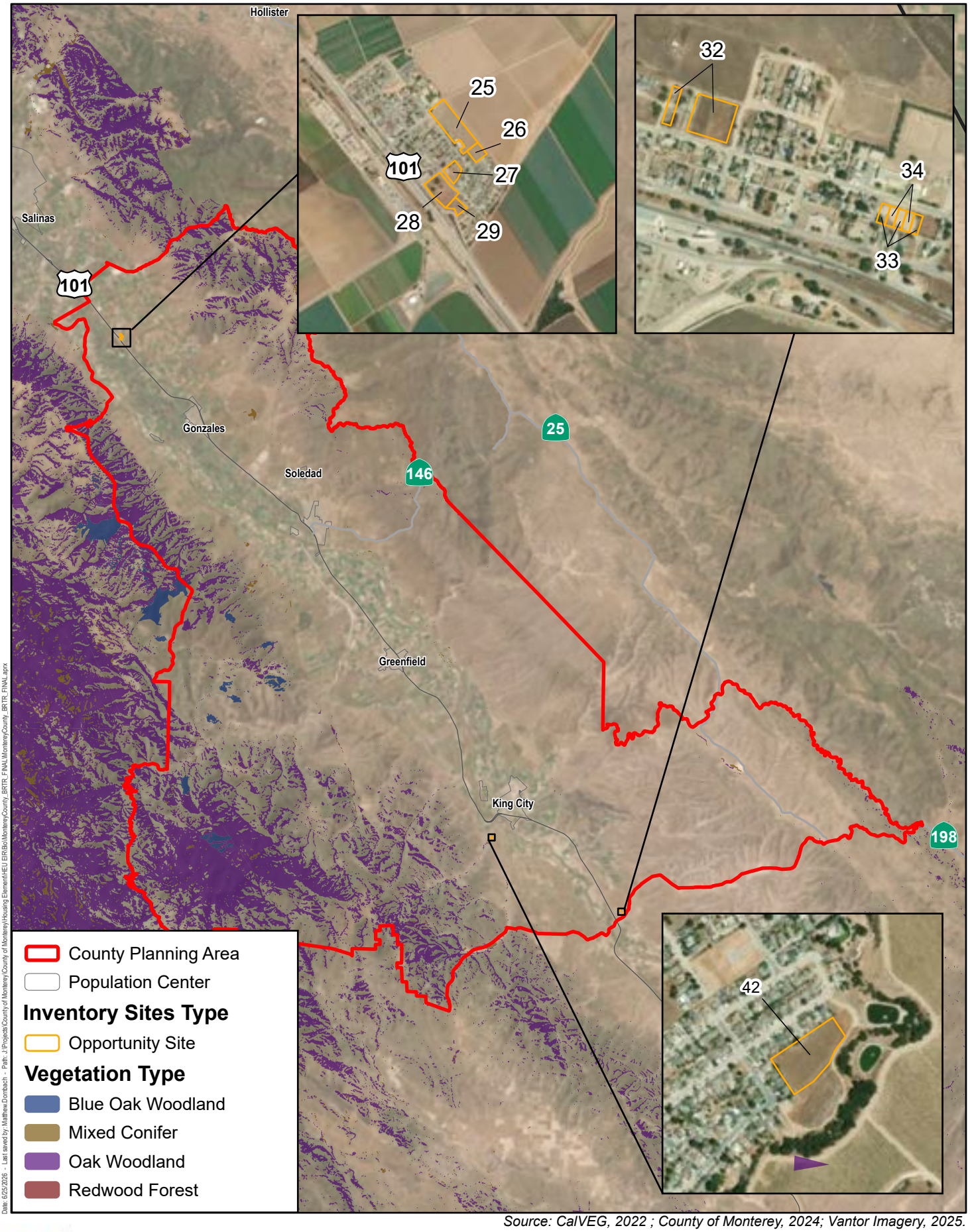
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**Figure 4.4-2b**

Forest Vegetation Types in Carmel Valley Master Plan

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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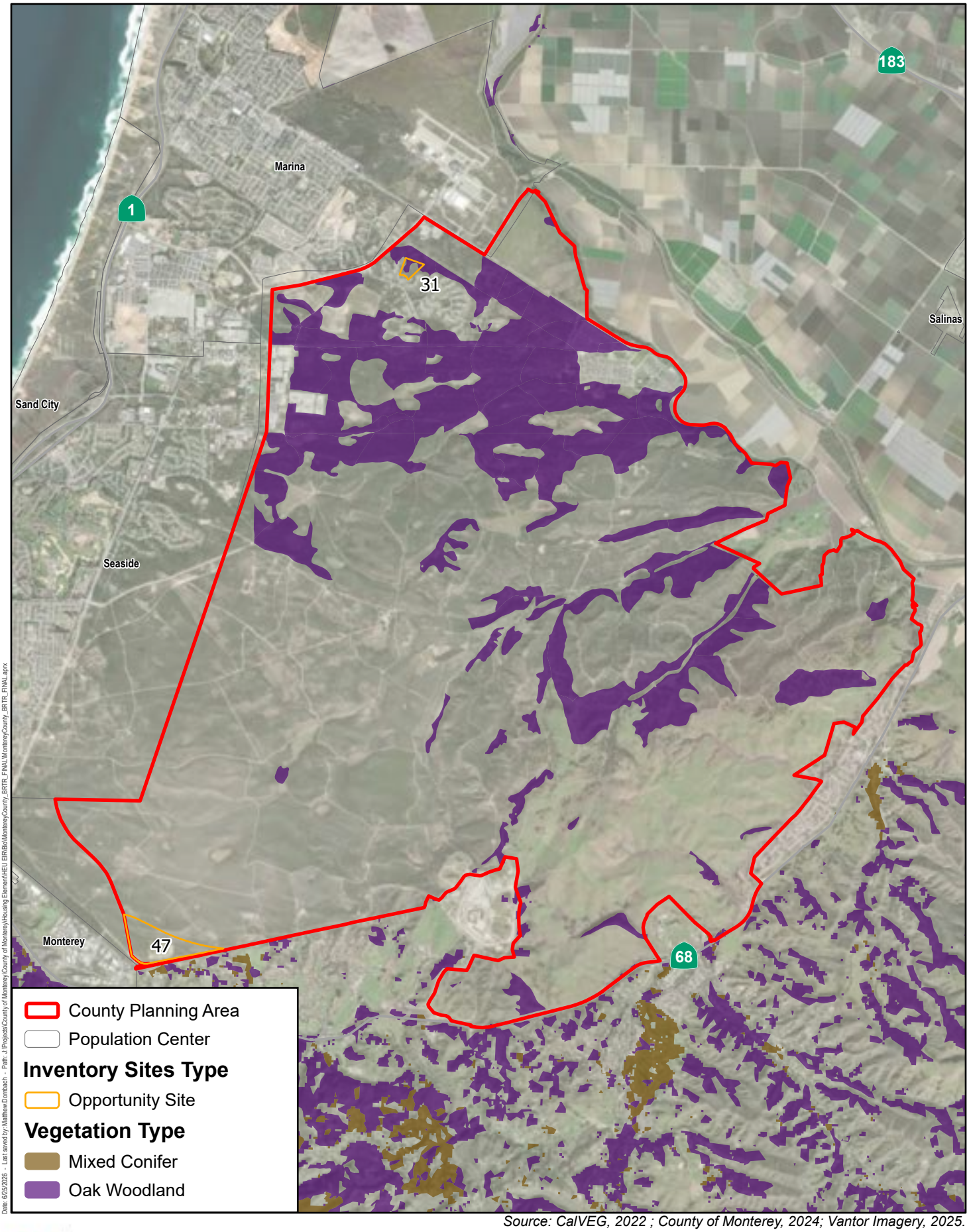
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**Figure 4.4-2c**

Forest Vegetation Types in Central Salinas Valley Area Plan

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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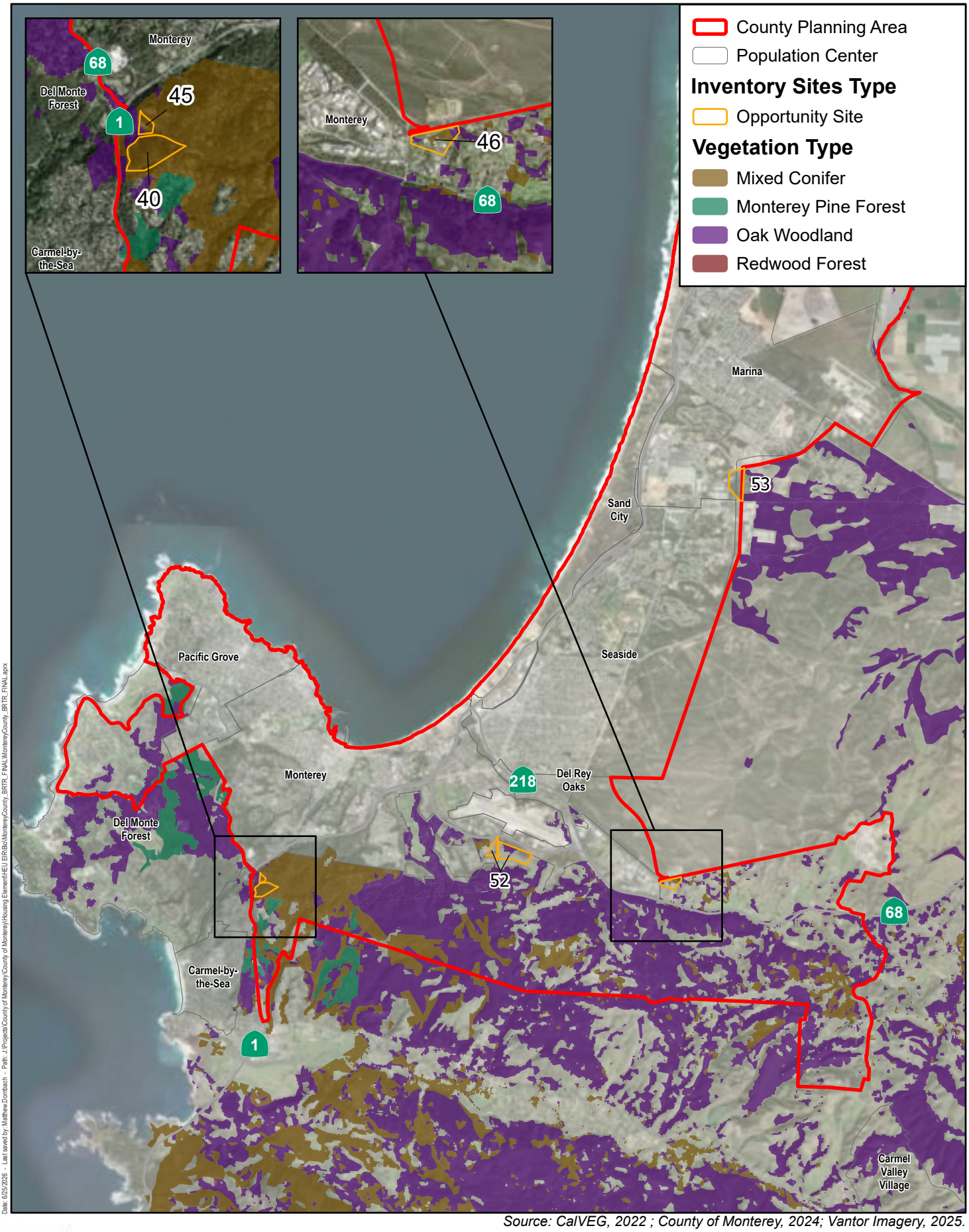
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**Figure 4.4-2d**

Forest Vegetation Types in Fort Ord Master Plan

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Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

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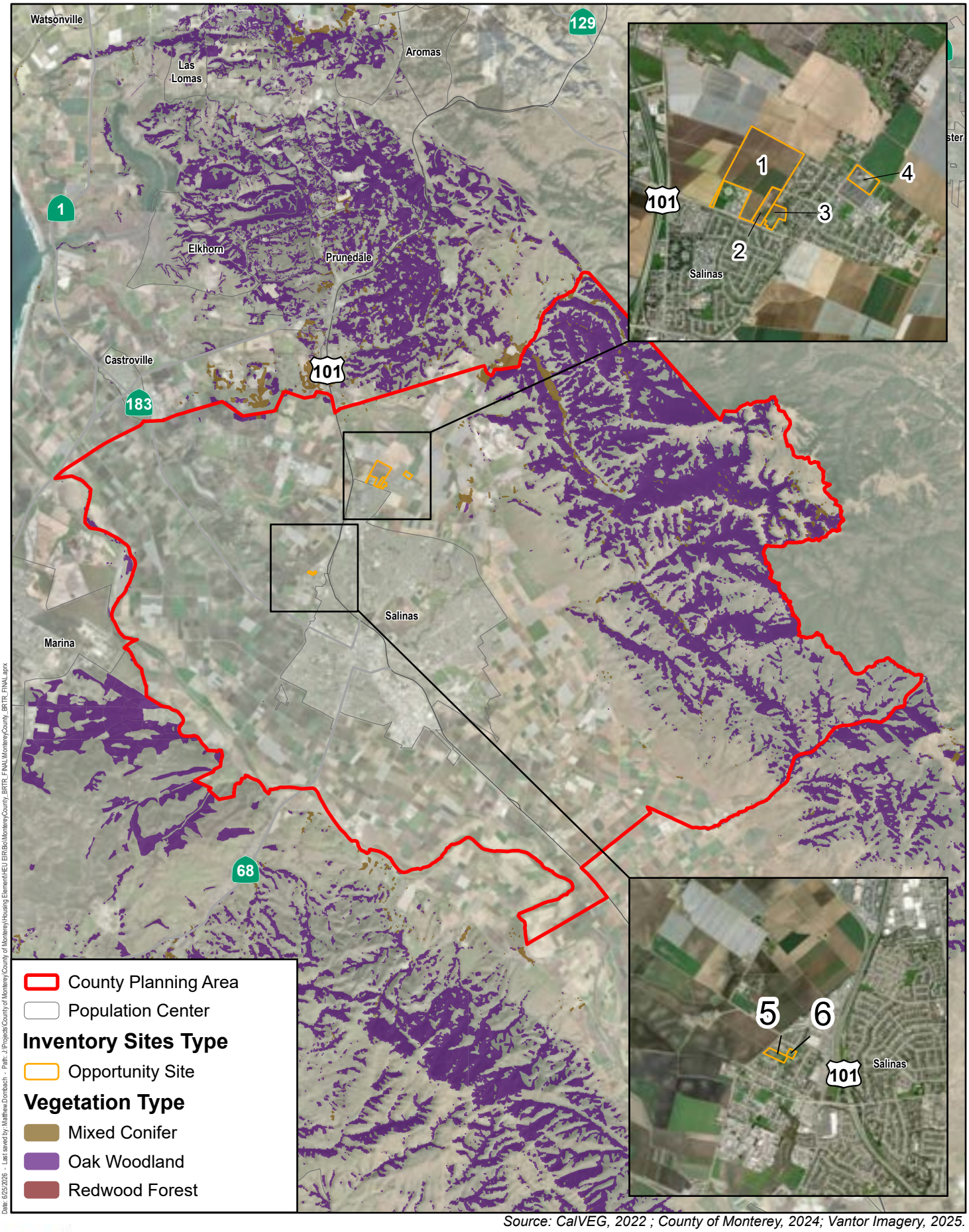
**Figure 4.4-2e**

Forest Vegetation Types in Greater Monterey Peninsula Area Plan



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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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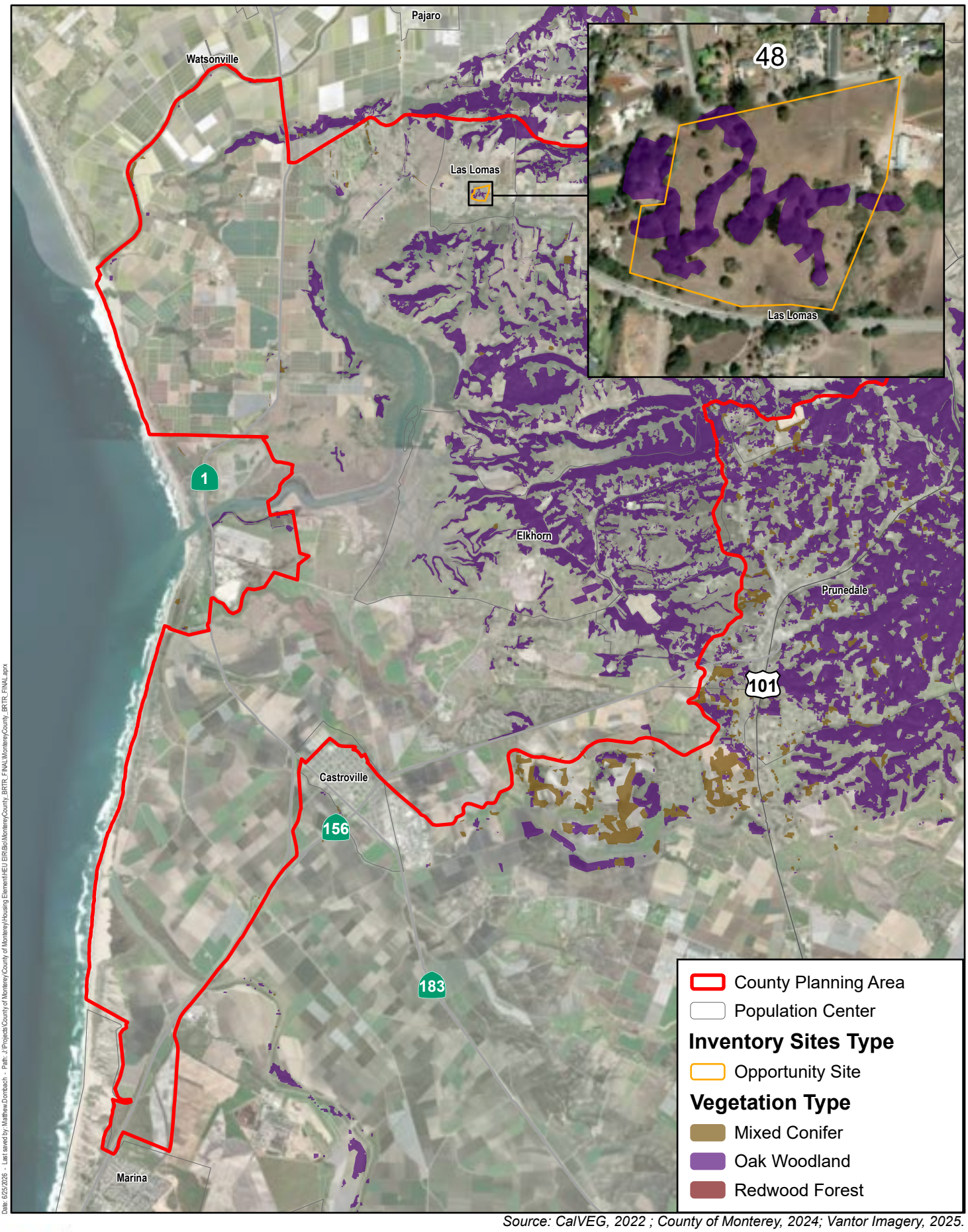
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**Figure 4.4-2f**

Forest Vegetation Types in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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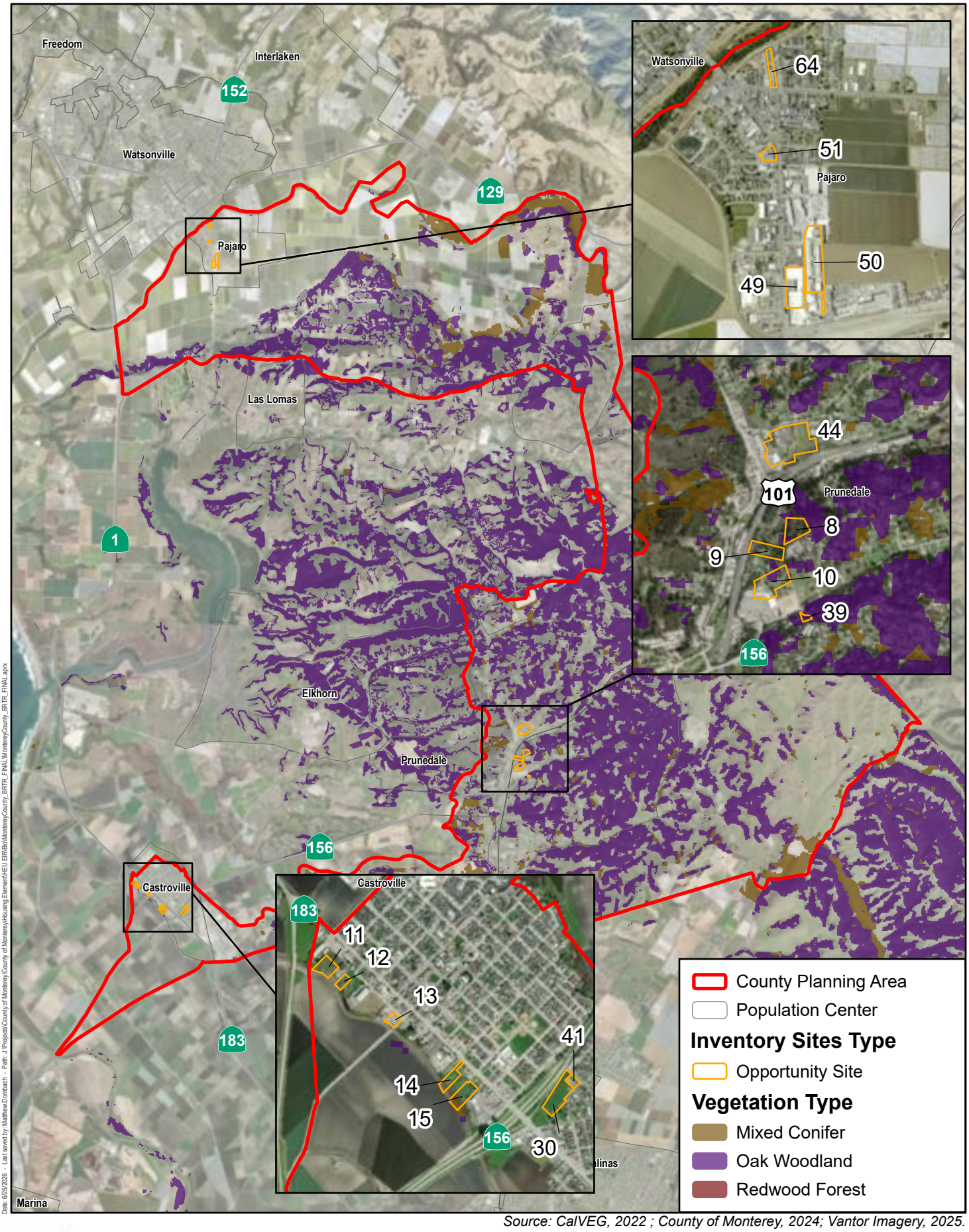
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**Figure 4.4-2g**

Forest Vegetation Types in North County Land Use Plan (Coastal)

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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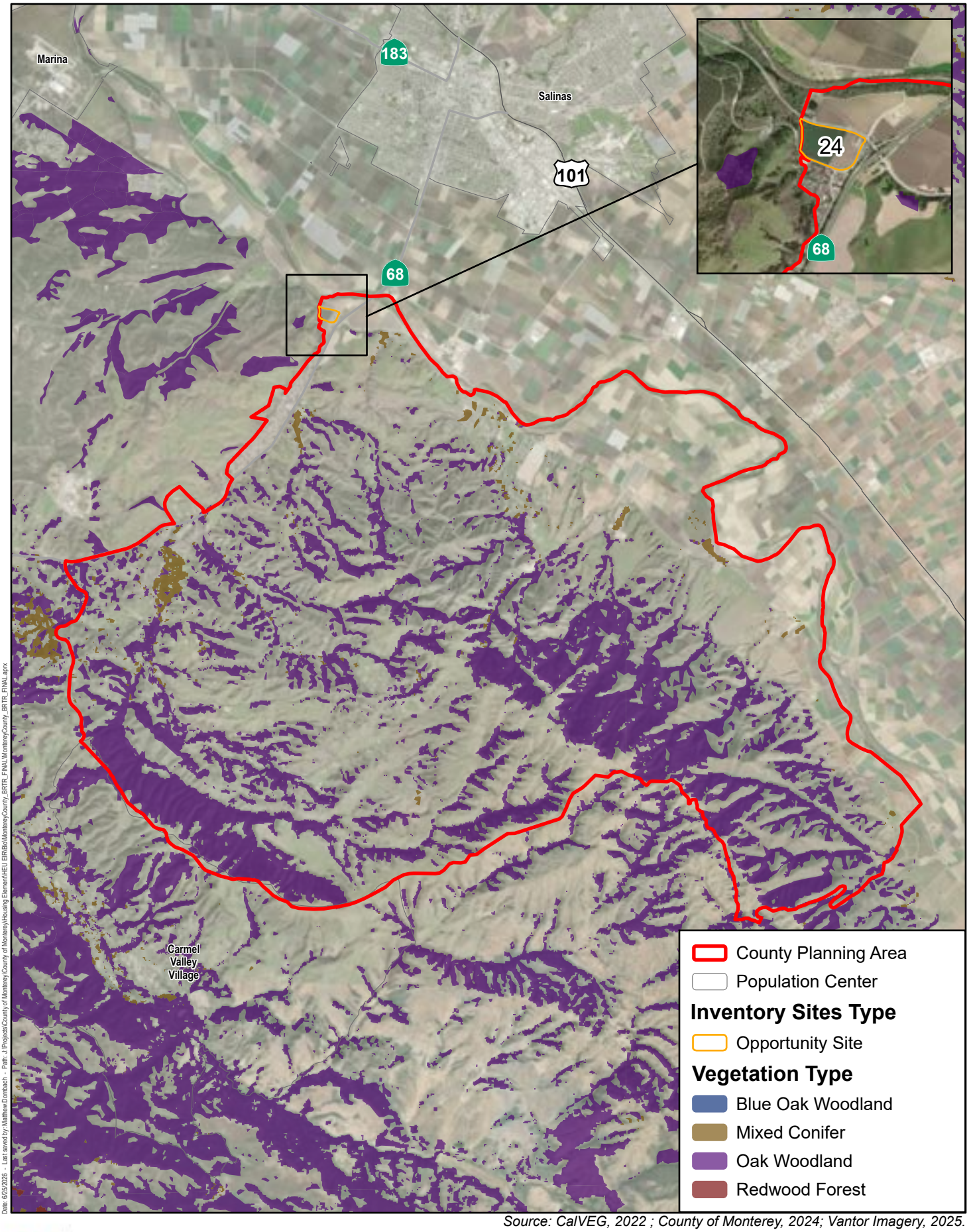
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**Figure 4.4-2h**

Forest Vegetation Types in North County Area Plan (Inland)

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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**Figure 4.4-2i**

Forest Vegetation Types in Toro Area Plan

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# 4.3 Air Quality

This section evaluates the potential for impacts related to air quality resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.3.1 Regulatory Setting

This section describes the federal, state, regional, and local regulatory framework adopted to address air quality.

### 4.3.1.1 Federal

### Clean Air Act (U.S. Code, Title 42, Section 7401 et seq.)

The Clean Air Act (CAA) of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The CAA authorizes the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Current NAAQS are listed in Table 4.3-1, National and California Ambient Air Quality Standards. The primary standards listed in Table 4.3-1 have been set at levels intended to protect public health. The USEPA has classified air basins (or portions thereof) as being in "attainment," "non-attainment," or "unclassified" for each criteria air pollutant based on if the NAAQS have been achieved. Non-attainment areas are air basins that do not meet one or more of the California adopted ambient air quality standards (CAAQS) and are subject to additional restrictions as required by the USEPA. If

an area is designated unclassified, it is because inadequate air quality data was available as a basis for a non-attainment or attainment designation. The USEPA classifies the North Central Coast Air Basin (NCCAB) as in attainment for the federal ozone ($O_3$), standard carbon monoxide (CO), nitrogen dioxide ($NO_2$), lead, respirable particulate matter ($PM_{10}$), fine particulate matter ($PM_{2.5}$), and sulfur dioxide ($SO_2$) standards. It is unclassifiable for $PM_{10}$ with respect to federal air quality standards. (MBARD 2024). Table 4.3-2, North Coast Central Air Basin Attainment Status, lists the attainment status of the NCCAB for criteria air pollutants.

**Table 4.3-1. National and California Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards[a] | National Standards[b] | |
|---|---|---|---|---|
| | | Concentration[c] | Primary[c, d] | Secondary[c, e] |
| Ozone ($O_3$)[f] | 1-Hour | 0.09 ppm (180 µg/m³) | — | Same as Primary Standards |
| | 8-Hour | 0.070 ppm (137 µg/m³) | 0.070 ppm (137 µg/m³) | |
| Respirable Particulate Matter ($PM_{10}$)[g] | 24-Hour | 50 µg/m³ | 150 µg/m³ | Same as Primary Standards |
| | Annual Arithmetic Mean | 20 µg/m³ | — | |
| Fine Particulate Matter ($PM_{2.5}$)[g] | 24-Hour | — | 35 µg/m³ | Same as Primary Standards |
| | Annual Arithmetic Mean | 12 µg/m³ | 12 µg/m³ | 15 µg/m³ |
| Carbon Monoxide (CO) | 8-Hour | 9 ppm (10 mg/m³) | 9 ppm (10 mg/m³) | None |
| | 1-Hour | 20 ppm (23 mg/m³) | 35 ppm (40 mg/m³) | |
| Nitrogen Dioxide ($NO_2$)[h] | Annual Arithmetic Mean | 0.030 ppm (57 µg/m³) | 0.053 ppm (100 µg/m³) | Same as Primary Standard |
| | 1-Hour | 0.18 ppm (470 mg/m³) | 100 ppb (188 µg/m³) | |
| Sulfur Dioxide ($SO_2$)[i] | Annual Arithmetic Mean | — | 0.030 ppm (for certain areas) | — |
| | 24-Hour | 0.04 ppm (105 µg/m³) | 0.14 ppm (for certain areas) | — |
| | 3-Hour | — | — | 0.5 ppm (1,300 µg/m³) |
| | 1-Hour | 0.25 ppm (655 µg/m³) | 75 ppb (196 µg/m³) | — |
| Lead[j, k] | 30-Day Average | 1.5 µg/m³ | — | — |
| | Calendar Quarter | — | 1.5 µg/m³ (for certain areas) | Same as Primary Standard |
| | Rolling 3-Month Average[7] | — | 0.15 µg/m³ | |
| Visibility-Reducing Particles[l] | 8-Hour | Refer to Footnote 12 | No National Standards | |
| Sulfates | 24-Hour | 25 µg/m³ | No National Standards | |
| Hydrogen Sulfide | 1-Hour | 0.03 ppm (42 µg/m³) | No National Standards | |
| Vinyl Chloride[j] | 24-Hour | 0.01 ppm (26 µg/m³) | No National Standards | |

**Source:** CARB 2016.

**Notes:** µg/m³ = micrograms per cubic meter; mg/m³ = milligram per cubic meter; ppb = parts per billion; ppm = parts per million

[a] California standards for $O_3$, CO, $SO_2$ (1-hour and 24-hour), $NO_2$, $PM_{10}$, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded. The CAAQS are listed in the Table of Standards in California Code of Regulations, Title 17, Section 70200.

[b] National standards (other than $O_3$, PM, and those based on annual averages) are not to be exceeded more than once per year. The $O_3$ standard is attained when the fourth highest 8-hour concentration measured at each site in 1 year, averaged over 3 years, is equal to or less than the standard. For $PM_{10}$, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m$^3$ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current national policies.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour $O_3$ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m$^3$ to 12.0 µg/m$^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m$^3$, as was the annual secondary standard of 15 µg/m$^3$. The existing 24-hour $PM_{10}$ standards (primary and secondary) of 150 µg/m$^3$ were retained as well. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[h] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[i] On June 2, 2010, a new 1-hour $SO_2$ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 $SO_2$ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[j] The California Air Resources Board (CARB) had identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m$^3$ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[l] In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

**Table 4.3-2. North Coast Central Air Basin Attainment Status**

| Pollutant | California Standards | National Standards |
|---|---|---|
| Ozone ($O_3$) (1-Hour) | Attainment | No National Standard |
| Ozone ($O_3$) (8-Hour) | Attainment | Attainment |
| Respirable Particulate Matter ($PM_{10}$) | **Non-attainment** | Attainment |
| Fine Particulate Matter ($PM_{2.5}$) | Attainment | Attainment |
| Carbon Monoxide (CO) | Monterey County – Attainment<br>San Benito County – Unclassified[a]<br>Santa Cruz County – Unclassified[a] | Attainment |
| Nitrogen Dioxide ($NO_2$) | Attainment | Attainment |
| Lead | Attainment | Attainment |
| Sulfur Dioxide ($SO_2$) | Attainment | Attainment |

**Source:** MBARD 2024.

**Note:**

[a] Unclassified; indicates data is not sufficient for determining attainment or non-attainment.

The CAA requires states to develop a plan to attain and maintain the NAAQS in all areas of the county and a specific plan to attain the standards for each area designated non-attainment for the NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to the USEPA for approval. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The SIP is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them.

#### 4.3.1.2 State

### Air Quality and Land Use Handbook: A Community Health Perspective

The California Air Resources Board (CARB) developed the Air Quality and Land Use Handbook: A Community Health Perspective to provide guidance on land use compatibility with sources of toxic air contaminants (TACs) (CARB 2005). These sources include freeways and high-traffic roads, commercial distribution centers, rail yards, refineries, dry cleaners, gasoline stations, and industrial facilities. The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs. The handbook indicates that land use agencies must balance other considerations, including housing and transportation needs, economic development priorities, and other quality-of-life issues.

### California Ambient Air Quality Standards

CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of air pollution control programs in California. The CAA allows states to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. CAAQS that are equal to or stricter than the federal standards that have been adopted for six criteria air pollutants. The CAAQS are listed in the Table of Standards in California Code of Regulations, Title 17, Section 70200, and provided in Table 4.3-1. Similar to the NAAQS, areas have been designated as attainment, non-attainment, or unclassified with respect to the CAAQS. As shown in Table 4.3-2, the NCCAB is in non-attainment with the CAAQS for $PM_{10}$. The NCCAB is designated as an attainment area for the state CO, $NO_2$, $SO_2$, $PM_{2.5}$, and lead.

### Toxic Air Contaminant Regulations

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Hot Spots Act). The act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. To date, CARB has designated nearly 200 compounds as TACs. The majority

of estimated health risks from TACs can be attributed to a relatively small number of compounds, the most important being PM from diesel-fueled engines (i.e., diesel particulate matter [DPM]).

### Assembly Bill 130/Senate Bill 131

AB 130 and SB 131, signed into effect in June 2025, are intended to streamline California Environmental Quality Act (CEQA) review of new housing development. The bills expanded CEQA exemptions for qualifying housing projects, specifically new infill development. AB 130 also included limitations of local jurisdictions' ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031.

#### 4.3.1.3 Regional

### Monterey Bay Air Resources District

The Monterey Bay Air Resources District (MBARD) has jurisdiction over air quality programs in Monterey County, Santa Cruz County, and San Benito County. State and local government projects, as well as projects proposed by the private sector, are subject to MBARD requirements if the sources are regulated by the MBARD (MBARD 2025).

The MBARD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Development projects in Monterey County are typically subject to the following MBARD Rules; other rules may apply depending on the proposed specific operations:

- **Rule 402, Nuisance.** Prohibits emissions that may cause injury, detriment, nuisance, or annoyance to any considerable number of people or to the public; endanger the comfort, repose, health, or safety of any such people or the public; or cause injury or damage to business or property.
- **Rule 403, Particulate Matter.** Establishes limits to the discharge of any particulate matter from non-stationary sources.
- **Rule 425, Use of Cutback Asphalt.** Established limits for the manufacture and use of high-VOC asphalt, including cutback, slow cure, and emulsified asphalt.
- **Rule 426, Architectural Coatings.** Establishes limits to the VOC content for coatings applied in the MBARD.

### Association of Monterey Bay Area Governments Regional Growth Forecast

The Association of Monterey Bay Area Governments (AMBAG) is the Metropolitan Planning Organization for the Monterey Bay Area. AMBAG develops population, housing and employment forecast estimates for the Monterey Bay region. The AMBAG forecast model is employment-driven using a shift-share model based on local data as well as state and national trends. Forecasted

employment growth informs population growth, which in turn drives household and housing growth. AMBAG first identifies regional and county-level forecast figures, then disaggregating county-level forecast numbers to the jurisdictional level for using in city- and county-planning documents.

The regional growth forecast also supports AMBAG planning efforts such as the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which is the long-range transportation plan for the Monterey Bay region. The MTP/SCS identifies regional transportation needs, investment priorities to meet those needs, and local, regional, state and federal transportation funding the Monterey Bay region expects to receive for these investments. The SCS demonstrates the region's ability to exceed the greenhouse gas (GHG) emissions reduction targets set forth by the CARB. The SCS outlines the region's plan for integrating the transportation network in an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands while reducing GHG emissions. The overall SCS land use development pattern complements the proposed transportation network which emphasizes multimodal system enhancements, system preservation, and improved access to high quality transit.

On Wednesday, June 15, 2022, the AMBAG Board of Directors adopted the Final 2045 MTP/SCS. Federal and state law requires that AMBAG prepare a long-range transportation plan every four years. Therefore, AMBAG is currently conducting outreach for preparation of Connect Monterey Bay 2050, the 2050 MTP/SCS.

#### 4.3.1.4 Local

### 2010 General Plan (Inland)

#### *Conservation and Open Space Element*

Goal OS-10 and Policies OS-10.1 through OS-10.15 of the Monterey County General Plan (2010 General Plan) calls for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities. Policy OS-10.7 supports the use of best available technology for reducing air pollution emissions. Policy OS-10.8 is intended to protect air quality from naturally occurring asbestos by requiring mitigation measures to control dust and emissions during construction, grading, quarrying, or surface mining operations.

#### *Circulation Element*

The Circulation Element includes goals and policies related to achieving an acceptable level of service (LOS) of D by 2030 for Monterey County roads and intersections (Policy C-1.1). Policy C-1.2 outlines ways in which the goal of Policy C-1.1 could be achieved. Policy C-1.3 requires circulation improvements that reduce direct on- and off-site project traffic impacts to be provided concurrently with new development. Policy C-1.4 requires projects that would reduce LOS below LOS D to phase construction in a manner that maintains the acceptable LOS D for all affected UMC roads. Circulation Element policies that encourage alternative transportation would reduce

criteria air pollutant emissions from mobile sources. For example, Policy C-2.6 encourages bicycle and automobile storage facilities in conjunction with public transportation facilities. Policy C-3.5 encourages transportation alternatives such as bicycles, carpools, public transit, and compact vehicles within and outside the public right-of-way. Policy C-4.3 requires consideration of the needs of bicyclists and pedestrians in all public rights-of-way. Policy C-4.5 requires new public local and collector roads to be located and designed to minimize disruption of existing development, discourage through auto traffic and provide for bicycle and pedestrian traffic in the right-of-way. Policy C-6.5 encourages use of public transit and alternative modes of transportation through land use designations and zoning which cluster employment centers with a mix of other uses, and project design that incorporates carpool areas, "park and ride" facilities and similar incentives. Policy C-9.2 requires construction or expansion of roadways in major transportation corridors to consider improved bike routes. Policy C-9.3 requires the County to promote the safe integration of bicycle systems with other public transportation modes. Policy C-9.6 requires new and improved multimodal transfer facilities, such as transit centers and park-and-ride lots, to include adequate bicycle access and secure bicycle parking facilities.

#### *Environmental Justice Element*

The County is currently in the process preparing a new Environmental Justice Element. The purpose of the Environmental Justice Element is to establish goals and policies intended to mitigate inequities for people who are disproportionately impacted by environmental hazards and health impacts. The Draft Environmental Justice Element includes policies focused on reducing exposure to TACs, specifically DPM and stationary sources from industrial activities. Draft Policy EJ-2.1 is to maintain and improve both indoor and outdoor air quality by identifying the sources of air pollution impacting disadvantaged communities and vulnerable populations and reducing emissions from these sources. Draft Policy EJ-2.2 is to coordinate with regional agencies to require stronger pollution controls at industrial and agricultural facilities in or near disadvantaged communities, to the extent feasible, and minimize the risk of exposure to, or contamination by, hazardous materials, prioritizing facilities in northern areas of Monterey County. Draft Policy EJ-2.3 is to expand programs and partnerships to inform and educate disadvantaged communities and vulnerable citizens about adverse health impacts associated with poor indoor and outdoor air quality, and direct resources toward programs to provide equipment and supplies to protect residents' and workers' health and safety.

### Monterey County Community Climate Action and Adaptation Plan

The County is currently preparing a Community Climate Action and Adaptation Plan (CCAAP). A draft of the CCAAP was released to the public in April 2026 (County of Monterey 2026). The CCAAP is an effort to reduce GHG emissions in line with the targets set by the State of California through 2045. Strategies to reduce GHG emissions include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation,

including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. Although the purpose of the CCAAP is reducing GHG emissions, the CCAAP strategies would result in a co-benefit of reducing criteria air pollutant emissions from energy and transportation.

## Area and Master Plans

### *Carmel Valley Master Plan*

To explore public transit as an alternative to the use of private automobiles and help preserve air quality, Policy CV-2.1 requires new development to include a road system adequate not only for its internally generated automobile traffic but also for bus (both transit and school), pedestrian, and bicycle traffic, which should logically pass through or be generated by the development.

### *Fort Ord Master Plan*

Objective A, Air Quality Policies A-1 through A-3, the programs thereunder support the protection of and improvements to air quality. Specifically, Air Quality Policy A-1 calls on the County to participate in regional planning efforts to improve air quality, such as continuing to cooperate with the MBARD in carrying out the regional Air Quality Management Plan and with the Transportation Agency of Monterey County to carry out the Congestion Management Plan (Programs A-1.1 and A-1.2). Air Quality Policy A-2 calls on the County to promote local efforts to improve air quality, such as avoiding or mitigating air quality impacts through the CEQA process and using the Transportation Demand Management Ordinance and similar transportation measures to encourage commute alternatives (Programs A-2.1 and A-2.2). Air Quality Policy A-1 and Programs A-3.1 and A-3.2 promote the integration of efficient land use strategies into planning and zoning to improve air quality. These include, but are not limited to, the enhancement of Central Business Districts, compact development patterns, residential densities that average above seven dwelling units per acre, clustered employment densities and activity centers, mixed use development, and integrated street patterns.

### *Toro Area Plan*

Policy T-2.10 states that increasing the accessibility of Toro residents to mass transit, either through maintenance of existing park and ride lots or new bus service, particularly in the Corral de Tierra, San Benancio, and River Road areas, should be studied and implemented.

### *Greater Monterey Peninsula Area Plan*

Policy GMP-2.9 encourages construction and expansion of all highways and major arterials to provide for bike paths, and states that it is desirable that bike paths be physically separate from motorized traffic.

## Community Plans

### *Castroville Community Plan*

The Castroville Community Plan Program Environmental Impact Report (EIR) includes the following mitigation measures related to air quality that are required to be incorporated into the design of future development as necessary:

- Implement best-available control measures (BACM) to reduce emissions of particulate matter, as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan during construction activities.
- Implement BACM to reduce emissions of toxic air contaminants, as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan during construction activities.
- Implement BACM to reduce criteria air pollutants of ROG, $NO_X$, CO and $PM_{10}$ as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan 1982, during operations.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan*

Land Use Plan Key Policy 3.1.1 focuses on uncongested flow of traffic, but states that public transportation should be expanded to provide a viable transportation alternative.

### *Carmel Area Land Use Plan*

Recommended Action 3.1.4 encourages initiation of a program by Monterey Peninsula Transit or other public carriers, in cooperation with appropriate recreational agencies, the County, and community representatives, to provide bus stops at appropriate access points and to expand bus service to recreation areas and visitor-serving facilities. Bus routes should be scheduled to serve residents' needs as well as the needs of visitors.

## 1982 General Plan (Coastal)

Goal 20 and the objectives and policies thereunder aim to provide for the protection and enhancement of Monterey County's air quality, through land use planning (Objective 20.1 and Policies 20.1.1 through 20.1.5) and regulating pollution sources and adopting programs to improve air quality (Objective 20.2 and Policies 20.2.1 through 20.2.7).

Goal 37 and the objectives and policies thereunder aim to promote a safe, effective, and economical transportation system that will service the existing and future land uses of Monterey County. It includes Policy 37.2.1 that requires transportation demands of proposed development to not exceed an acceptable LOS for existing transportation facilities, unless appropriate increases in capacities are provided for; Policy 37.4.1 that requires the County to encourage overall land use patterns which

reduce the need to travel; and Policy 37.4.2 that encourages the provision, where feasible, of bicycle and automobile storage facilities to be used in conjunction with public transportation.

Goal 38 aims to minimize the negative impacts of transportation in Monterey County. Objective 38.1 is to plan for transportation modes and strategies that ensure good air quality, reduce noise, reduce the consumption of fossil fuels, and reduce the need to devote additional lands to transportation use, and Policy 38.1.1 requires the County to support the implementation of measures for reducing air pollution from transportation sources.

## 4.3.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to air quality.

### 4.3.2.1 Climate

The project is in the NCCAB. The NCCAB is composed of Monterey, Santa Cruz, and San Benito counties and covers an area of more than 5,100 square miles. The air basin features varied vegetation, climate, and geography and includes portions of several mountain ranges: the Santa Lucia and Gabilan Ranges in Monterey and San Benito Counties, the southern portion of the Santa Cruz Mountains in Santa Cruz County, and the Diablo Range in the eastern half of San Benito County. The coastal terraces in the Santa Cruz area, the flat plains surrounding Watsonville, Salinas, and King City, and the southern Santa Clara Valley are markedly defined by these mountain ranges.

The Pacific High pressure cell, a semi-permanent high-pressure cell in the eastern Pacific Ocean, is the controlling factor in the climate of the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends from the Pacific High, and warms and dries as it descends, resulting in generally sunny skies and dry weather (MBARD 2008). The relatively cooler temperature of the Pacific Ocean creates a layer of cool air directly over the ocean. This stable temperature inversion of warm air over a cooler coastal layer of air creates an onshore air current that passes over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer aloft air acts as a lid that inhibits vertical air movement and allows air pollutants to concentrate in the lower level.

The generally northwest-southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito valleys creates a weak low pressure that intensifies the onshore air flow during the afternoon and evening.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows

pollutants to build up over a period of a few days. It is most often during this season that north or east winds develop, transporting pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB.

During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

In the project area, average annual temperatures in degrees Fahrenheit are relatively stable and range from winter lows in the upper 30s to summer highs in the middle 70s (WRCC 2016). The total average annual precipitation throughout Monterey County varies, generally between 14 and 40 inches, with the majority of rainfall occurring from November through March.

#### 4.3.2.2 Air Pollutants and Effects

Air quality laws and regulations have historically divided air pollutants into two broad categories: criteria air pollutants and non-criteria air pollutants, or TACs. The purpose of this section is to evaluate the potential criteria air pollutant impacts of the project. Criteria air pollutants are a group of common air pollutants regulated by federal and state governments through ambient air quality standards based on criteria regarding the health and environmental effects of pollution. The criteria air pollutants pertinent to the analysis in this memorandum are carbon monoxide (CO), nitrogen oxides ($NO_x$), ozone ($O_3$), particulate matter (particulate matter measuring no more than 10 microns in diameter [$PM_{10}$] and particulate matter measuring no more than 2.5 microns in diameter [$PM_{2.5}$]), and sulfur dioxide ($SO_2$). The following describes the health effects of these criteria air pollutants.

##### Carbon Monoxide

CO is a colorless, odorless, poisonous gas produced by combustion processes, primarily mobile sources. When CO gets into the body, it combines with chemicals in the blood and prevents blood from providing oxygen to cells, tissues, and organs. Because the body requires oxygen for energy, high-level exposure to CO can cause serious health effects, including death (USEPA 2024a).

##### Nitrogen Oxides

$NO_x$ is a general term pertaining to compounds including nitric oxide (NO), nitrogen dioxide ($NO_2$), and other $NO_x$. $NO_x$ is produced from burning fuels, including gasoline, diesel, and coal. $NO_x$ reacts with volatile organic compounds (VOCs) to form ground-level $O_3$ (smog). $NO_x$ is linked to a number of adverse respiratory system effects (USEPA 2024b).

### Ozone

Ground-level $O_3$ is not emitted directly into the air but is formed by chemical reactions of "precursor" pollutants ($NO_x$ and VOCs) in the presence of sunlight. Major emission sources include $NO_x$ and VOC emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents. $O_3$ can trigger a variety of health problems, particularly for sensitive receptors, including children, older adults, and people of all ages who have lung diseases, such as asthma (USEPA 2024c).

### Particulate Matter

Particulate matter includes dust, metals, organic compounds, and other tiny particles of solid materials that are released into and move around in the air. Particulates are produced by many sources, including the burning of diesel fuel by trucks and buses, industrial processes, fires, and windblown dust. Particulate pollution can cause nose and throat irritation and heart and lung problems. Particulate matter is measured in microns, which are 1 millionth of 1 meter in length (or 1 thousandth of 1 millimeter). $PM_{10}$ is small (i.e., respirable) particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter (CARB 2025a).

### Sulfur Dioxide

$SO_2$ is formed primarily by the combustion of sulfur-containing fossil fuels, especially at power plants and industrial facilities. $SO_2$ is linked to a number of adverse effects on the respiratory system (USEPA 2025d).

#### 4.3.2.3 Existing Ambient Air Quality

The MBARD manages air quality in the NCCAB. The MBARD operates a network of ambient air monitoring stations throughout the NCCAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the CAAQS and the NAAQS. There are three monitoring stations in Monterey County. Given that opportunity sites are in different regions of the UMC, distances between monitoring stations and opportunity sites vary. As such, data for each of the three air monitoring stations is listed below. Monitoring stations closest to opportunity sites include the Salinas station on 855 East Laurel Drive in the City of Salinas, which measures $O_3$, CO, $NO_2$ and $PM_{2.5}$; the Carmel Valley monitoring station on 34 Ford Road in Carmel Valley, which measures $O_3$, CO, $NO_2$ and $PM_{2.5}$; and the King City monitoring station on 415 Pearl Street in King City, which measures $O_3$, $PM_{10}$, and $PM_{2.5}$ concentrations. Concentrations of monitored pollutants are presented in Table 4.3-3, Monitored Ambient Air Quality at the Salinas Monitoring Station, Table 4.3-4, Monitored Ambient Air Quality at the Carmel Valley Monitoring Station, and Table 4.3-5, Monitored Ambient Air Quality at the King City Monitoring Station. Concentrations of 1-hour and 8-hour $O_3$ did not exceed

CAAQS in 2021, 2022, or 2023. The monitored 24-hour $PM_{2.5}$ values were exceeded in 2023 at the Salinas monitoring station. The monitored 24-hour $PM_{10}$ CAAQS were exceeded in 2021, 2022, and 2023. The 1-hour and annual NAAQS and CAAQS for $NO_2$ were not exceeded. No CO data or $SO_2$ data is available from monitoring sites in Monterey County.

**Table 4.3-3. Monitored Ambient Air Quality at the Salinas Monitoring Station**

| Pollutant | Standard | Monitoring Station | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| **Ozone ($O_3$)** | | | | | |
| Maximum 1-hour concentration (ppm) | | Salinas | 0.064 | 0.057 | 0.064 |
| Number of days exceeded | State: > 0.12 ppm | | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | | 0.057 | 0.052 | 0.056 |
| Number of days exceeded | State: > 0.07 ppm | | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | | 0 | 0 | 0 |
| **Particulate Matter Smaller than or Equal to 2.5 Microns in Diameter ($PM_{2.5}$)** | | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | Salinas | 19.7 | 23.8 | 41.1 |
| Number of days exceeded | Federal: > 35 µg/m$^3$ | | 0 | 0 | 1 |
| Annual arithmetic average concentration (µg/m$^3$) | | | 4.8 | 5.1 | 7.7 |
| Exceeded for the year | State: > 12 µg/m$^3$ | | No | No | No |
| | Federal: > 15 µg/m$^3$ | | No | No | No |
| **Nitrogen Dioxide ($NO_2$)** | | | | | |
| Maximum 1-hour concentration (ppm) | | Salinas | 0.027 | 0.030 | 0.031 |
| Number of days exceeded | State: > 0.18 ppm | | 0 | 0 | 0 |
| Annual arithmetic average concentration (ppm) | | | 0.003 | [a] | 0.003 |
| Exceeded for the year | State: > 0.030 ppm | | No | No | No |
| | Federal: > 0.053 ppm | | No | No | No |

**Source:** CARB 2025b.

**Notes:** µg/m$^3$ = micrograms per cubic meter; $NO_2$ = nitrogen dioxide; $O_3$ = ozone; $PM_{2.5}$ = particulate matter smaller than or equal to 2.5 microns in diameter; $PM_{10}$ = particulate matter smaller than or equal to 10 microns in diameter; ppm = parts per million

Opportunity Sites 1 through 15, 24 through 29, 30, 31, 39, 41, 44 and 48 through 51, and 64 are closest to the Salinas monitoring station

[a] = indicates that there was insufficient data to determine the value

**Table 4.3-4. Monitored Ambient Air Quality at the Carmel Valley Monitoring Station**

| Pollutant | Standard | Monitoring Station | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| **Ozone ($O_3$)** | | | | | |
| Maximum 1-hour concentration (ppm) | | Carmel Valley | 0.065 | 0.060 | 0.075 |
| Number of days exceeded | State: > 0.12 ppm | | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | | 0.062 | 0.052 | 0.055 |
| Number of days exceeded | State: > 0.07 ppm | | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | | 0 | 0 | 0 |
| **Particulate Matter Smaller than or Equal to 2.5 Microns in Diameter ($PM_{2.5}$)** | | | | | |
| Maximum 24-hour concentration (µg/m³) | | Carmel Valley | 13.1 | 13.7 | 22.0 |
| Number of days exceeded | Federal: > 35 µg/m³ | | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m³) | | | 3.5 | 3.5 | 4.0 |
| Exceeded for the year | State: > 12 µg/m³ | | No | No | No |
| | Federal: > 15 µg/m³ | | No | No | No |

**Source:** CARB 2025b.

**Notes:** µg/m³ = micrograms per cubic meter; ppm = parts per million

Opportunity Sites 16 through 23, 35 through 38, 40, 43, 45 through 47, and 53 through 56 are closest to the Carmel Valley monitoring station

**Table 4.3-5. Monitored Ambient Air Quality at the King City Monitoring Station**

| Pollutant | Standard | Monitoring Station | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| **Ozone ($O_3$)** | | | | | |
| Maximum 1-hour concentration (ppm) | | King City | 0.078 | 0.070 | 0.063 |
| Number of days exceeded | State: > 0.12 ppm | | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | | 0.064 | 0.057 | 0.057 |
| Number of days exceeded | State: > 0.07 ppm | | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | | 0 | 0 | 0 |
| **Particulate Matter Smaller than or Equal to 2.5 Microns in Diameter ($PM_{2.5}$)** | | | | | |
| Maximum 24-hour concentration (µg/m³) | | King City | 19.3 | 24.4 | 35.4 |
| Number of days exceeded | Federal: > 35 µg/m³ | | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m³) | | | 6.6 | 5.1 | 4.5 |
| Exceeded for the year | State: > 12 µg/m³ | | No | No | No |
| | Federal: > 15 µg/m³ | | No | No | No |

| Pollutant | Standard | Monitoring Station | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| **Particulate Matter Smaller than or Equal to 10 Microns in Diameter ($PM_{10}$)** | | | | | |
| Maximum 24-hour concentration (µg/m³) | | King City | 94.9 | 64.5 | 84.7 |
| Number of days exceeded | State: > 50 µg/m³ | | 13 | 16 | 7 |
| | Federal: > 150 µg/m³ | | 0 | 0 | 0 |

**Source:** CARB 2025b.

**Notes:** µg/m³ = micrograms per cubic meter; ppm = parts per million

Opportunity Sites 32 through 34, and 42 are closest to the King City monitoring station

### 4.3.3 Method of Analysis

Mobile emissions typically account for the majority of land development emissions. As such, air quality modeling includes evaluation of the theoretical maximum buildout capacity of 12,497 housing units, consistent with the assumptions of the vehicle miles traveled (VMT) analysis in Section 4.16, Transportation. However, as described in Chapter 3, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in UMC. Therefore, while the analysis determination for significance finding is based on the theoretical maximum buildout capacity, a modeling scenario that assumes a reasonable capacity of 4,434 housing units is also modeled for comparison purposes.

Maximum daily construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. The project is a land use plan and does not propose any specific construction projects, and the details of future construction under the HEU6 are currently unknown. Therefore, estimated maximum daily construction emissions were estimated using CalEEMod default assumptions. Modeling assumes a buildout year of 2031. The recommended default assumption of 600 tons of export material per acre and 1,190 tons of import per acre was used to estimate total earthwork and demolition export for the project, based on the CalEEMod estimate for total project acreage (Ramboll 2023). Modeling assumes dust control measures would be implemented as required by MBARD Rule 402 and Rule 403. Dust control measures include watering on-site two times per day, application of dust suppressant to unpaved roads, limits on vehicle speeds, and sweeping of paved roads. These assumptions were made for the theoretical maximum buildout capacity of 12,497 housing units and a more reasonable buildout scenario of 4,434 housing units.

The project's impact on regional emissions related to vehicle emissions is based on its impact on Monterey Countywide VMT data for buildout (2031) conditions from Kimley-Horn (Appendix L). Criteria air pollutant emissions associated with the project's increase in VMT were calculated using the EMFAC2025 (V2.1.0) Emissions Inventory. EMFAC2025 V2.1.0 reflects federal actions to disapprove USEPA's actions to grant California waivers for several regulations in the model, including Advanced Clean Cars II, Advanced Clean Trucks, Zero-Emission Airport

Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions (Warranty Phase 1), and Heavy-Duty Omnibus (Omnibus), although these actions are being contested by the State of California (CARB 2026).

Existing Monterey Countywide VMT is approximately 3,267,663 and is estimated to increase to 3,968,469 by 2031 without project implementation. Under the theoretical maximum capacity scenario, the estimated Monterey Countywide VMT would be 4,277,358 in the buildout year of 2031. For informational purposes, a Monterey Countywide VMT estimate of 4,174,693 VMT provided by Kimley-Horn for the development of up to 4,910 units was used to estimate emissions under a conservative reasonable buildout scenario for vehicle emissions (Appendix L). The 4,910-unit scenario and associated VMT data were derived from a previous iteration of the traffic model prior to project revisions. This VMT estimate closely aligns with the current reasonable buildout scenario of 4,434 housing units and provides a conservative assumption for mobile emissions. Detailed assumptions, modeling datasheets, and calculation sheets are provided in Appendix F, Air Quality Technical Memorandum.

The following sections address various potential impacts relating to air quality that could result from implementation of the project.

### 4.3.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on air quality if it would:

- **Threshold 1:** Conflict with or obstruct implementation of the applicable air quality plan.
- **Threshold 2:** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard).
- **Threshold 3:** Expose sensitive receptors to substantial pollutant concentrations.
- **Threshold 4:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines also states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make impact determinations. The County has not adopted significance thresholds to evaluate the significance of air quality impacts. In lieu of any set quantitative air quality significance thresholds, the thresholds outlined in the MBARD's CEQA Air Quality Guidelines are used to determine the potential significance of air quality impacts.

According to MBARD, potential local air quality impacts would occur if a project would generate 82 pounds per day or more of $PM_{10}$ during construction activities. Quantitative thresholds for construction emissions of $PM_{2.5}$, $NO_x$, $SO_x$, CO, and VOCs have not been adopted by MBARD.

Instead, emissions of $PM_{2.5}$, $NO_x$, $SO_x$, CO, and VOCs that would result during construction are evaluated qualitatively for potential air quality impacts based on guidance from MBARD. Table 4.3-6, Significance Thresholds for Operational Air Quality Impacts, provides the applicable MBARD thresholds for project operation.

**Table 4.3-6. Significance Thresholds for Operational Air Quality Impacts**

| Pollutant | Emission Rate (pounds/day) |
|---|---|
| Particulate matter less than 10 microns ($PM_{10}$) | 82 |
| Particulate matter less than 2.5 microns ($PM_{2.5}$) | 55 |
| Nitrogen oxides ($NO_X$) | 137 |
| Sulfur oxides ($SO_X$) | 150 |
| Carbon monoxide (CO) | 550 |
| Volatile organic compound (VOC) | 137 |

**Sources:** MBARD 2008.

The thresholds listed in Table 4.3-6 represent screening level thresholds that can be used to evaluate if project-related emissions cause a significant impact on air quality. Emissions below the screening level thresholds do not cause a significant impact. For non-attainment pollutants ($O_3$, with $O_3$ precursors $NO_x$ and VOCs, and $PM_{10}$), if emissions exceed the thresholds in Table 4.3-6, the HEU6 would result in a cumulatively considerable net increase in these pollutants and, thus, would have a significant impact on ambient air quality.

## 4.3.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to air quality that could result from implementation of the project.

### 4.3.5.1 Threshold 1: Consistency with Applicable Air Quality Plan

**Threshold 1:** Would the project conflict with or obstruct implementation of the applicable air quality plan?

#### Impact Analysis

The SIP is the document that sets forth the state's strategies for achieving federal air quality standards. The applicable air quality planning documents for the MBARD are the 2012–2015 Air Quality Management Plan (AQMP) (MBARD 2017), which is the MBARD portion of the SIP. The AQMP was prepared by the MBARD for CARB to be included as part of the SIP. These plans demonstrate how the NCCAB would either maintain or strive to attain the CAAQS. Both documents were developed in conjunction with each other by the MBARD to reduce regional 8-hour $O_3$ emission.

The MBARD relies on information from CARB and AMBAG, including projected growth in the region and resulting mobile emissions, area emissions, and other source emissions, to project

future emissions and to develop appropriate strategies for the reduction of source emissions through regulatory controls. The majority of regional emissions (60 percent) result from mobile source emissions. These emissions are reduced primarily through emissions standards, which are established by CARB, but are further reduced at the district level through incentive programs to encourage the use of hybrid vehicles and electric vehicles (MBARD 2017). Because of the limited jurisdiction MBARD has over mobile source emissions and the limited control that individual projects have on influencing the public's ultimate use of motor vehicles, compliance with the AQMP is based on whether an individual project would comply with the emissions projections contained in the AQMP. Reduction strategies were applied to the region as a whole and determined to adequately meet the CAAQS based on the regional emissions projections. A project that proposes growth that exceeds growth assumptions would potentially conflict with the Regional Air Quality Strategy and SIP because it would potentially result in mobile source emissions that would exceed the projected emissions inventory.

The CARB mobile source emission projections and AMBAG growth projections are based on population and vehicle trends and land use plans, such as the 2010 General Plan (Inland) and the 1982 General Plan (Coastal). That is, the emissions estimates that CARB and the MBARD use to plan for achieving NAAQS and CAAQS compliance are based on the land uses projected by AMBAG. If a project proposes development that is greater than that anticipated in the County's General Plan or AMBAG's growth projections, that project might conflict with the SIP and Regional Air Quality Strategy and may contribute to a potentially significant cumulative impact on air quality.

The HEU6 would not propose any specific development. Instead, the HEU6 would identify action programs that could be implemented to provide additional capacity for future development of dwelling units consistent with state housing law. Further, the County is not required to build dwelling units to meet its Regional Housing Needs Assessment (RHNA) requirements; it is only required to identify potential sites and to create the framework to allow the market the opportunity to develop these units. AMBAG growth projections are updated periodically (every four years), the current RHNA targets are based on updated projections compared to the projections available for the 2010 General Plan (Inland) and development of the AQMP. The 2010 General Plan (Inland) incorporated the AMBAG 2004 forecasts, which projected UMC population growth to 135,375 by 2030 (County of Monterey 2008). As outlined in Section 7.2, Population and Housing, the current population estimate for 2023 in UMC is 104,555, and projected to reach 109,976 by 2030, which is below the 2010 General Plan (Inland) population projection.

The HEU6 included a total capacity of 4,434 units across various income categories to meet the assigned RHNA, which was allocated based on AMBAG population and growth forecasts. As discussed in Section 7.2, the project would increase Monterey County's housing stock by approximately 9.9 percent (adding 4,434 dwelling units) and its population by approximately 11

percent (adding 12,859 people). Under this reasonable capacity scenario, UMC population would increase to approximately 117,414, which is in the 2010 General Plan (Inland) growth projection for the planning cycle that was accounted for in the AQMP (135,375 people).

For the air quality analysis purposes, this PEIR evaluates the theoretical maximum of 12,497 housing units to conservatively disclose the potential environmental consequences of the highest intensity legally permissible under the proposed rezoning. Under this scenario, assuming 2.9 people per household per Section 7.2, population would increase by approximately 36,241 people over the planning cycle. The theoretical maximum would result in a total population of 140,796 people that would exceed the 2010 General Plan (Inland) and AQMP projection. As stated in Section 4.3.3, Method of Analysis, this theoretical maximum is not supported by historical building trends nor would it align with market demand in the UMC. However, rezoning to higher allowable densities would be required throughout the UMC in opportunity sites to allow for development capacity to meet the RHNA target. Development beyond AQMP projections may be accommodated by implementation of the HEU6. As such, the HEU6 potentially conflicts with applicable Air Quality Plans, and impacts would be potentially significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

As further discussed in Section 3.5.2, Rezoning and Split Zoning, the County will rezone all opportunity sites to create enough capacity to meet the RHNA target. The County cannot achieve the RHNA target without rezoning to allow for additional development capacity. As such, mitigation to require consistency with AQMP growth projections is not feasible. Revised projections that incorporate development capacity under the HEU6 will be incorporated into the next update to the AQMP. As such, this impact would remain significant and unavoidable until the AQMP is updated.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.3.5.2 Threshold 2: Cumulative Increase in Criteria Pollutant Emissions

**Threshold 2:** Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?

## Impact Analysis

Construction and operation of development that could be accommodated under the HEU6 under both the theoretical maximum and more reasonable buildout scenarios are addressed below, followed by a discussion of health impacts related to criteria air pollutants.

### *Construction*

Construction of future projects under the HEU6 would result in temporary air pollutants associated with soil disturbance, dust emissions, employee and material delivery vehicle exhaust, off-gassing from paving and coating activities, and combustion pollutants from off-road construction equipment. Construction-related air pollution emissions can vary from day to day, depending on the level of activity, type of activity, and prevailing weather conditions. The primary air pollutants of concern from construction activities are particulate matter (including both $PM_{10}$ and $PM_{2.5}$), CO, and $O_3$ precursors (including $NO_x$ and VOCs).

Estimated maximum daily construction emissions for the theoretical maximum total capacity of 12,497 new housing units are provided in Table 4.3-7, Estimated Theoretical Capacity Maximum Daily Construction Emissions (pounds/day). Table 4.3-8, Reasonable Capacity Estimated Maximum Daily Construction Emissions (pounds/day), provides maximum daily construction emissions for the reasonable development capacity of 4,434 housing units.

**Table 4.3-7. Estimated Theoretical Capacity Maximum Daily Construction Emissions (pounds/day)**

| Construction Phase | VOC | $NO_x$ | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Demolition | 3 | 27 | 24 | <1 | 1 | 1 |
| Site Preparation | 3 | 29 | 30 | <1 | 9 | 5 |
| Grading | 3 | 39 | 33 | <1 | 7 | 3 |
| Building Construction | 51 | 90 | 509 | <1 | 68 | 17 |
| Architectural Coating | 408 | 5 | 67 | <1 | 12 | 3 |
| Paving | 1 | 7 | 10 | <1 | <1 | <1 |
| *MBARD Threshold*[a] | — | — | — | — | *82* | — |
| **Significant?** | **—** | **—** | **—** | **—** | **No** | **—** |

**Source:** CAPCOA 2022. Refer to Appendix F for model output.

**Notes:** CO = carbon monoxide; $NO_x$ = oxides of nitrogen; $PM_{10}$ = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compounds

[a] MBARD has only adopted a numeric threshold for $PM_{10}$ for construction emissions. Emissions for other pollutants are provided for informational purposes.

**Table 4.3-8. Reasonable Capacity Estimated Maximum Daily Construction Emissions (pounds/day)**

| Construction Phase | VOC | $NO_x$ | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Demolition | 3 | 27 | 24 | <1 | 1 | 1 |
| Site Preparation | 4 | 36 | 34 | <1 | 9 | 5 |
| Grading | 4 | 46 | 35 | <1 | 7 | 4 |
| Building Construction | 19 | 40 | 189 | <1 | 24 | 6 |
| Architectural Coating | 381 | 2 | 23 | <1 | 4 | 1 |
| Paving | 1 | 7 | 10 | <1 | <1 | <1 |
| *MBARD Threshold*[a] | — | — | — | — | *82* | — |
| **Significant?** | **—** | **—** | **—** | **—** | **No** | **—** |

**Source**: CAPCOA 2022. Refer to Appendix F for model output.

**Notes:** CO = carbon monoxide; $NO_x$ = oxides of nitrogen; $PM_{10}$ = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compounds

[a] MBARD has only adopted a numeric threshold for $PM_{10}$ for construction emissions. Emissions for other pollutants are provided for informational purposes.

As shown in Table 4.3-7 and Table 4.3-8, maximum emissions estimates indicate that construction activities anticipated under the HEU6 would not result in significant levels of $PM_{10}$ air emissions. These maximum emissions assume the most intense construction that would be required for concurrent construction of all housing units accommodated under the plan. In reality, various construction phases would occur on a smaller scale throughout the UMC on a given day. Because future housing development would occur throughout the UMC and over the multi-year planning period, it is unlikely that development of multiple projects would occur in the same area simultaneously such that individual construction activities would combine to exceed the MBARD $PM_{10}$ threshold. Under the reasonable capacity scenario, even if building construction at two adjacent opportunity sites would occur simultaneously, combined emissions would not exceed the $PM_{10}$ threshold. As previously described, it is highly unlikely that the level of construction assumed for the theoretical maximum capacity scenario would occur during the HEU6 planning period. The greatest contributor to $PM_{10}$ emissions during building construction is personal vehicle trips associated with construction workers. CalEEMod estimates these trips based on the total number of dwelling units input for the theoretical maximum capacity, resulting in a default assumption of almost 9,000 daily vehicle trips associated with worker trips under this scenario (refer to Appendix F). A combined construction scenario requiring more than the approximately 9,000 daily workers trips modeled for the maximum capacity scenario would not occur. Therefore, similar to the reasonable capacity scenario, emissions are unlikely to combine to exceed the MBARD threshold under the maximum capacity scenario.

As previously mentioned, the MBARD does not identify quantitative thresholds for other criteria air pollutants during construction. Based on MBARD guidance, construction projects in the MBARD that would use typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders, are considered to be accommodated in the emission inventories

of state- and federally required air plans and are assumed not to have a significant impact on the attainment and maintenance of $O_3$ AAQS. Construction details, including the equipment needed, for projects completed under the HEU6 is not known at this time. However, construction is anticipated to require only construction equipment typical of residential development projects. The identified opportunity sites do not include features that would require unusual equipment, such as a remote location requiring use of helicopter material delivery. Additionally, the timing of most projects would be spaced out over the sixth cycle buildout period (5 years remaining until 2031), and emissions would be released periodically throughout the buildout period. Individual project emissions would generally not exceed the estimated daily average emissions shown in Table 4.3-7 or Table 4.3-8. It should also be noted that these results reflect default modeling assumptions for the total amount of growth accommodated by the HEU6 under the theoretical maximum capacity and reasonable capacity scenarios rather than an actual construction project. While project-specific details are not known at this time, projects under the HEU6 would be required to comply with MBARD Rule 426, which establishes limits to the VOC content for architectural coatings. Projects under the HEU6 would incorporate dust control measures, as described above (i.e., MBARD Rule 402 and Rule 403). Compliance with MBARD Rule 426 and implementation of the dust control measures would reduce fugitive dust emissions from ground disturbance and VOC emissions associated with architectural coatings for projects implemented under the HEU6. As such, construction of future development consistent with the project would not result in significant criteria air pollutant emissions during construction, and impacts would be less than significant.

#### *Operation*

Long-term air pollutant emissions impacts are those associated with stationary sources and mobile sources involving any project-related changes. Stationary sources of emissions include the use of architectural coatings, consumer products, landscape equipment, and energy use. Area sources of air pollutant emissions associated with future development under the HEU6 include fuel combustion emissions from space and water heating, fuel combustion emissions from landscape maintenance equipment, VOC emissions from periodic repainting of interior and exterior surfaces, and natural gas use. Increased traffic volumes also contribute to regional emissions of criteria air pollutants. Estimated maximum daily operational emissions, including net increase in mobile emissions, are provided in Table 4.3-9, Theoretical Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day). Maximum daily emissions under the reasonable capacity scenario (4,434 units) are provided in Table 4.3-10, Reasonable Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day). Only mobile emissions under the reasonable capacity scenario used VMT data based on the 4,910-unit scenario derived from a previous iteration of the traffic model. The reasonable capacity table is included for comparison purposes, and the project impact analysis in this section is based on the theoretical maximum capacity of 12,497 units.

**Table 4.3-9. Theoretical Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day)**

| Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Area | 376 | 7 | 707 | <0.1 | <1 | <1 |
| Energy | 7 | 126 | 54 | 0 | 10 | 10 |
| Mobile | 146 | 140 | 2,356 | 1 | 20 | 8 |
| **Total Daily Emissions** | **529** | **273** | **3,117** | **1** | **30** | **18** |
| *MBARD Threshold* | *137* | *137* | *550* | *150* | *82* | *55* |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **No** | **No** |

**Source:** CAPCOA 2022. Refer to Appendix F for model output.

**Notes:** CO = carbon monoxide; $NO_x$ = nitrogen oxides; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; $PM_{10}$ = particulate matter measuring no more than 10 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compound

**Table 4.3-10. Reasonable Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day)**

| Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Area | 133 | 2 | 251 | <0.1 | <1 | <1 |
| Energy | 3 | 45 | 19 | <1 | 4 | 4 |
| Mobile | 97 | 93 | 1,573 | 1 | 13 | 5 |
| **Total Daily Emissions** | **233** | **140** | **1,843** | **1** | **17** | **9** |
| *MBARD Threshold* | *137* | *137* | *550* | *150* | *82* | *55* |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **No** | **No** |

**Source:** CAPCOA 2022. Refer to Appendix F for model output.

**Notes:** CO = carbon monoxide; $NO_x$ = nitrogen oxides; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; $PM_{10}$ = particulate matter measuring no more than 10 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compound

As shown in Table 4.3-9 and Table 4.3-10, operational emissions for HEU6 buildout would generally not exceed the MBARD thresholds for SOx, $PM_{10}$, and $PM_{2.5}$. However, operational emissions would exceed MBARD thresholds for VOC, NOx, and CO emissions, mainly attributed to mobile emissions and area source emissions from application of consumer products. As such, the project would have the potential to contribute to the existing significant cumulative impact related to ozone. Although details of individual projects are not currently known, based on the default assumptions for residential development in CalEEMod (Version 2022.1) and EMFAC025 V2.1.0 this impact would be potentially significant.

### *Health Impacts of Criteria Air Pollutants*

As discussed in Section 4.3.2.2, criteria air pollutants have the potential to result in health impacts, such as headaches or throat irritation, at the time of exposure. In December 2018, in the case of Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR air quality analysis must meaningfully connect the identified air quality impacts on the human health consequences of those impacts or meaningfully explain why that analysis cannot be provided.

Consistent with other agencies statewide, neither the County nor MBARD have adopted thresholds related to potential health impacts from criteria air pollutant emissions because individual exposure levels and individual reactions to localized short-term exposure to pollutant emissions from individual project construction and operation cannot be feasibly determined. For example, the localized level of ozone that receptors may be exposed to from VOC or NOx emissions cannot be determined because the formation of ozone is not directly determined by the quantity of VOC and $NO_X$ emissions generated by a project (San Joaquin Valley APCD 2015). The amount of ozone formed depends on heat and sunlight exposure, and once formed, ozone is likely to be dispersed or carried away from the site by wind. Conversely, ozone exposure on site could have been transported to the site by wind and be attributable to another source (USEPA 2025d). Currently, there are no known methods that can feasibly ascertain the ultimate locations of ozone formation associated with the emissions of ozone precursors such as VOC and $NO_X$ (San Joaquin Valley APCD 2015). Additionally, although buildout of the HEU6 has the potential to exceed MBARD VOC, NOx, and CO thresholds from total allowable new growth, the specific distribution of emission sources is currently unknown. Therefore, localized impacts related to VOCs cannot be determined. However, because operation of allowable development under the HEU6 would have the potential to exceed the MBARD daily emissions thresholds, it would potentially contribute to a regional increase in ambient air emissions. This impact would be potentially significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Construction of projects under the HEU6 are not anticipated to result in significant criteria air pollutant emissions. During operation, cumulative development may exceed the MBARD threshold for VOC, NOx, and CO emissions. Feasible mitigation is not available to reduce operational emissions to below a level of significance. During operation, potentially significant impacts related to VOC, NOx, and CO emissions from the increase in area sources are primarily due to consumer products, but also including landscape equipment, hearths, and mobile emissions. The VOC content of consumer products and architectural coatings, and landscape emissions standards, are beyond the control of the County. It is also beyond the scope of the project for mitigation to control consumers' choices in available products.

Emissions could also be reduced through limiting future natural gas use in buildings, including all-electric development or a ban on new natural gas hearths. However, requirements that limit natural gas use in residential development would conflict with AB 130, which limits the ability of local agencies to enact more restrictive standards for residential development. AB 130 and SB 131, signed into effect in June 2025, are intended to streamline CEQA review of new housing development. The bills expanded CEQA exemptions for qualifying housing projects, specifically

new infill development. AB 130 also included limitations of local jurisdictions' ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. As such, this limitation would be in place for the entirety of the HEU6 planning cycle, and mitigation measures to control emissions from these sources are not feasible. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP is not yet adopted, and the details of potential future restrictions are unknown. If adopted, applicable natural gas regulations for CCAAP consistency would reduce criteria air pollutant emissions as a co-benefit of GHG emissions reductions.

MBARD has updated VOC content limits for architectural coating over time to be increasingly more stringent. Similarly, CARB establishes and periodically updates VOC limits for various consumer products. CARB also regulates small off-road engines, such as landscaping equipment, and vehicle emissions and standards are anticipated to become more stringent over time, and as older vehicles are retired. Emissions standards have increased over time, and CARB is currently considering more stringent emissions standards and incentives to increase zero emissions equipment use (CARB 2026). MBARD also has ongoing incentive programs to replace fuel powered landscape equipment with battery-operated equipment (MBARD 2025). As such, MBARD and CARB efforts would likely reduce project VOC, NOx, and CO emissions over time. Additionally, despite AB 130 limitations at the local level, all-electric development remains a statewide goal. Incentive programs are currently available, such as the California Electric Homes Program, that provide incentives for new all-electric home construction (CEC 2025). The state is also challenging federal actions that result in higher future mobile emissions, as described above in Section 4.3.3. As such, mobile and area emissions calculated in Table 4.3-9 and Table 4.3-10 are a conservative scenario. However, because these changes to emissions standards and program participation are beyond the control of the County, and because specifics of future development are unknown at this phase of the plan, it cannot be demonstrated that VOC, NOx, or CO emissions would be reduced to a less than significant level. Future development with 25 or more units associated with the proposed project would require compliance with Sections 20.64.250 and 21.64.250 of the Monterey County Code (County Code), which establish requirements to reduce vehicle trips by ensuring that new developments, redevelopment, and expansion of existing developments contain infrastructure and programs to reduce vehicle travel and encourage alternative modes of travel. Compliance with this code would result in reductions in vehicle emissions, but the extent of reductions cannot be calculated at this time. This operational impact would remain significant and unavoidable.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.3.5.3 Threshold 3: Sensitive Receptors

**Threshold 3:** Would the project expose sensitive receptors to substantial pollutant concentrations?

### Impact Analysis

Sensitive receptors include daycare centers, schools, retirement homes, hospitals, residential homes or other facilities that may house individuals with health conditions who are adversely impacted by changes in air quality. The two primary emissions of concern regarding health effects for land development projects are CO hotspots and TACs. An analysis of the potential health impacts from operational emissions is also discussed below.

#### *Carbon Monoxide Hotspots*

Areas with high vehicle density, such as congested intersections and parking garages, have the potential to create high concentrations of CO, known as "CO hotspots." Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. This typically occurs at severely congested intersections (LOS E or worse) (Caltrans 2010), where peak hour volumes exceed 44,000 vehicles per hour (BAAD 2022). Future projects under the HEU6 would result in or contribute to a CO hotspot if they worsen traffic flow at signalized intersections operating at LOS E or F. It should be noted that no LOS analysis was completed as part of the project-specific Transportation Analysis.

##### Construction

Construction under the HEU6 would not result in creation of CO hotspots. While the timing of projects is not yet known, it is assumed that construction would occur gradually across opportunity sites throughout the buildout period. Construction impacts are also temporary and short-term in nature, and potential congestion impact that could result in creation of a CO hotspot would also be temporary and short-term. Given that construction activities would be spread out, traffic congestion would not worsen to the extent that a CO hotspot would result.

##### Operation

Future average daily traffic (ADT) volumes were provided as part of preparation of the VMT Memorandum (Appendix L) for estimated Year 2031 under no-project and full theoretical maximum buildout scenarios. The maximum future ADT on any area roadway is 66,899 ADT on

Cabrillo Highway. Peak hour ADT is typically assumed to be approximately 10 percent of total ADT (Caltrans). Therefore, peak hourly traffic would be approximately 6,690 vehicles on any roadway with project implementation. Peak hourly traffic would not exceed 44,000 vehicles per hour at any intersection, regardless of LOS. The project would not increase delay at a deficient intersection with a peak hour volume of more than 44,000 vehicles; Therefore, the project would not have the potential to result in a CO hotspot. This impact would be less than significant.

#### Conclusion

Implementation of the HEU6 would not result in creation of CO hotspots. Therefore, impacts would be less than significant.

### *Toxic Air Contaminants*

#### Construction

The greatest potential for TAC emissions during project construction activities would be related to emissions of DPM associated with heavy equipment operations during site preparation, grading, and utilities construction activities. Construction-related activities would result in short-term emissions of DPM from off-road, heavy-duty diesel equipment exhaust. However, specific future construction activities under the HEU6 are currently unknown. Construction activities would be spread throughout the project area and generally would not take place in a singular location or at the same time.

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Health risks are generally evaluated over a 30-year exposure period. The duration of construction activities near any specific sensitive receptor would be temporary and short-term. Additionally, with ongoing implementation of USEPA and CARB requirements for cleaner fuels, off-road diesel engine retrofits, and new, low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced over the years as construction of projects consistent with the HEU6 continues. Therefore, impacts associated with temporary DPM emissions from development under the HEU6 would be less than significant.

#### Operation

CARB's Air Quality and Land Use Handbook (CARB 2005) lists several potential sources of substantial DPM emissions, including (1) freeways or urban roads with 100,000 vehicles per day, (2) commercial facilities that require heavy-truck deliveries or include drive-through facilities, (3) extraction operations or cement manufacturing, (4) power plants, (5) recycling and garbage transfer stations, (6) industrial land uses that require heavy-truck trips, (7) farming operations, and (8) dry cleaners using perchloroethylene.

Development under the project would consist of new residential units, which are not considered significant sources of TACs. Therefore, the project would not be a significant source of TACs during operation. However, implementation of HEU6 may result in construction of new residences near existing sources of TACs. Many of the opportunity sites, such as Opportunity Sites 1 and 4, are near existing agricultural land which may include farming operations that emit significant levels of TACs. There are several County policies and regulations that require agricultural buffers to protect agriculture from impacts of incompatible development and mitigate against the effects of agricultural operations on residential development, such as Policy AG-1.2 in the Agriculture Element of the 2010 General Plan, Section 21.66.030 of the County Code, Section 20.144.080(D)(6) of the Coastal Implementation Plan, and Section 20.146.070(D)(2) of the Coastal Implementation Plan. To enforce agricultural buffer requirements, Mitigation Measure (MM-) AG-OBJ-3 and MM-AG-CONS-4 require all housing projects streamlining under the Objective Process or Consistency Process that are adjacent to agricultural areas to establish a well-defined buffer zone in the area to be developed, consistent with local regulations (refer to Section 4.2, Agriculture and Forestry Resources). Additionally, the split zoning strategy as part of the HEU6 would consider buffer/easement requirements to strategically rezone portions of the opportunity sites outside required buffer areas. Given that project-specific details are unavailable, the extent of potential impacts at each opportunity site cannot be determined at this time. Future projects completed under the HEU6 would be subject to the 2010 General Plan goals and policies listed in Section 4.3.2, Environmental Setting, which requires best management practices to limit dust and emissions during construction and grading activities. Future projects would also be subject to MBARD Rules 402 and 403, which prohibits nuisance emissions and limits PM emissions from non-stationary and stationary sources (excluding stationary internal combustion engines). Additionally, effective February 15, 2017, potential sources of TACs are subject to MBARD Rule 1000, Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants, which requires risk assessments for new or modified sources that have the potential to emit TACs. Potential sources subject to Rule 1000 are not permitted to operate until a risk assessment has been completed.

Conformance with the County's 2010 General Plan goals and policies and MBARD Rules would generally reduce potential impacts from placing new residences near sources of TACs. Future individual projects completed under the HEU6 are subject to MBARD rules and regulations, and potential impacts related to exposure of future residences to TACs would be identified and mitigated to the greatest extent feasible before project implementation. Therefore, impacts would be less than significant.

### Significance of Impact

Less than significant impact.

## Mitigation Measures

No mitigation measures are required.

## Significance of Impact After Mitigation

Less than significant impact.

### 4.3.5.4 Threshold 4: Odors

**Threshold 4:** Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

## Impact Analysis

### *Construction*

Construction associated with implementation of the HEU6 could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust and architectural coatings. However, because the construction equipment would be operating at various locations throughout the UMC to implement the HEU6, construction would not take place all at once, individual receptors would be exposed to minimal construction odor at any given time. Additionally, future projects would be required to comply with Rule 426, Architectural Coatings, which limits VOC content in architectural coatings applied in the MBARD. Because any operations near existing receptors would be temporary, impacts associated with odors during construction would be less than significant.

### *Operation*

CARB's Air Quality and Land Use Handbook includes a list of the most common sources of odor complaints received by local air districts (CARB 2005). Typical sources of odor complaints include facilities such as sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The project consists of residential units; none of the odor-causing facilities listed previously would be allowed. In addition, any potential future odor sources would be subject to MBARD Rule 402, Nuisance, regarding odor control and are not permitted to allow nuisance odors to affect nearby receptors. Therefore, project operation would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

## Significance of Impact

Less than significant impact.

## Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.3.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to air quality that could result from implementation of the project.

### 4.3.6.1 Cumulative Threshold 1: Consistency with Applicable Air Quality Plan

The AQMP and SIP are intended to address cumulative impacts in the NCCAB based on future growth predicted by AMBAG. Cumulative projects located in the region would have the potential to result in a cumulative impact on Air Quality Plans if, in combination, they would conflict with or obstruct implementation of the AQMP or applicable portions of the SIP. Projects that are inconsistent with the regional planning documents that the AQMP and SIP are based on would have the potential to result in cumulative impacts if they would include development beyond regional projections. Cumulative projects located in adjacent jurisdictions would generally be consistent with the SIP and the AQMP because projects would be required to be consistent with adopted General Plans or other planning documents accounted for in the Regional Air Quality Strategy growth projections. However, other regional jurisdictions are also responsible for planning to accommodate their RHNA. Implementation of the project, and likely implementation of HEU6 in neighboring jurisdictions, would involve rezoning opportunity sites to a higher development capacity and would not be consistent with the growth projections in the AQMP and SIP. Implementation of the project, in combination with other cumulative projects, would potentially conflict with or obstruct implementation of the AQMP or SIP Air Quality Plans. A cumulative impact would occur, and the project's contribution would be cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

No feasible mitigation measures are available.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

### 4.3.6.2 Cumulative Threshold 2: Cumulative Increase in Criteria Pollutant Emissions

The project may result in a cumulatively considerable net increase of criteria air pollutants for which the NCCAB is in non-attainment under an applicable federal or state ambient air quality

standard. Specifically, the HEU6 may result in exceeding regional significance thresholds for VOC and NOx during operation. Feasible mitigation is not available to reduce operational emissions to below a level of significance. During operation, potentially significant impacts related to VOC, NOx, and CO emissions are from the increase in mobile emissions and area sources, primarily consumer products, but also including landscape equipment and hearths. The VOC content of consumer products and architectural coatings, and landscape emissions standards, are beyond the control of the County. It is also beyond the scope of the project for mitigation to control consumers' choices in available products. As discussed above in Section 4.3.5.2, mitigation measures to control emissions from these sources are not feasible. This impact would remain cumulatively considerable and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

No feasible mitigation measures are available, as described under Mitigation Measures in Section 4.3.5.2.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.3.6.3 Cumulative Threshold 3: Sensitive Receptors

Cumulative growth in the project area would have the potential to increase congestion and potentially result in CO hotspots. However, as described previously, the increase in vehicle trips associated with the implementation of the project, in combination with cumulative trips, would not result in congestion that would result in a CO hotspot at any intersection during construction or operation. Therefore, a significant cumulative impact related to CO hotspots would not occur.

The cumulative projects located in the NCCAB would also have the potential to result in a significant cumulative impact associated with sensitive receptors if, in combination, they would expose sensitive receptors to a substantial concentration of TACs that would significantly increase health risks. Impacts would generally be localized and not cumulative in nature because impacts related to a particular source of TACs would be limited to the proximity of the source. Cumulative projects with the potential to generate substantial pollutant concentrations would be required to comply with the CARB program to reduce diesel emissions. Similar to the project, cumulative projects in UMC and adjacent jurisdictions would be required to comply with CARB's recommendations for siting new sensitive receptors and requirements for reducing diesel emissions. Stationary sources in the NCCAB would be required to obtain operating permits from the MBARD and comply with emission thresholds for TACs. Specific developments that would occur as a result of the HEU6 would be required to obtain operating permits from the MBARD

and comply with emission thresholds for TACs or hazardous air pollutants. Therefore, the project, in combination with other cumulative projects in the region, would not result in a cumulatively considerable contribution associated with impacts on sensitive receptors.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.3.6.4 Cumulative Threshold 4: Odors

Impacts related to objectionable odors are limited to the area immediately surrounding the odor source and are not cumulative in nature because the air emissions that cause odors disperse beyond the sources of the odor. As the emissions disperse, the odor becomes decreasingly detectable. The project would not result in odor impacts. Therefore, implementation of the project, in combination with other cumulative projects, would not result in a cumulatively considerable contribution associated with impacts to objectionable odors.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.3.7 Conclusion

Implementation of the project would result in less than significant impacts pertaining to sensitive receptors, odors, and emissions of criteria air pollutants during construction. However, operation of development under the HEU6 would have the potential to exceed MBARD thresholds for VOC, NOx, and CO during operation. Additionally, growth accommodated by the HEU6 would exceed AQMP projections. Mitigation measures to control emissions from area and mobile sources or limit development capacity to AQMP projections are not feasible. These impacts would remain significant and unavoidable.

# 4.4 Biological Resources

This section evaluates the potential for impacts related to biological resources resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description. HEU6 includes a total of 56 opportunity sites: Opportunity Sites 1 through 6, 8 through 56, and 64, totaling 4,434 housing units as a reasonable development capacity, and this section used this reasonable development assumption to be developed on each parcel to determine impacts on biological resources.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.4.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address biological resources.

### 4.4.1.1 Federal

#### Coastal Zone Management Act of 1972 (16 USC 1451 through 1464, Chapter 33)

The Coastal Zone Management Act is administered by the National Oceanic and Atmospheric Administration's Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and—where possible—enhance or restore the Coastal Zone in the United States. California has a federally approved Coastal Zone Management Program, and the Coastal Zone Management Act is administered by the California Coastal Commission. Therefore, the Coastal Zone Management Program and permit requirements are discussed further in the California Coastal Act section under state regulations.

### Federal Clean Water Act (U.S. Code, Title 33, Sections 1251–1376)

The federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project proponent to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The State Water Resources Control Board administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

### Federal Endangered Species Act (U.S. Code, Title 16, Sections 1531–1543)

The federal Endangered Species Act (FESA) and its subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems on which they depend. In addition, FESA defines species as "threatened" or "endangered" and provides regulatory protection for listed species. FESA also provides a program for the conservation and recovery of threatened and endangered species and the conservation of designated critical habitat that the U.S. Fish and Wildlife Service (USFWS) determines to be required for the survival and recovery of these listed species.

### Migratory Bird Treaty Act (U.S. Code, Title 16, Sections 703–712)

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (Senate Bill 2547). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to August 31). In addition, USFWS commonly places restrictions on disturbances allowed near active raptor nests.

### Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. In accordance with the Navigable Waters Protection Rule, effective June 22, 2020, the USACE exerts jurisdiction over waters of the United States, including the territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters (33 CFR Part 328; 40 CFR Parts 110, 112, 116, 117, 120, 122, 230, 300, 302, and 401).

#### 4.4.1.2 State

### California Coastal Act and California Coastal Commission

The California Coastal Commission (CCC) was established by voter initiative in 1972 and was made permanent by the California Legislature through the adoption of the California Coastal Act (CCA) of 1976 (California Public Resources Code, Section 30000 et seq.). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the Coastal Zone. Under the CCA, cities and counties are responsible for preparing Local Coastal Programs to obtain authority to issue coastal development permits for projects in their jurisdiction. Local Coastal Programs consist of Land Use Plans, zoning ordinances, zoning maps, and other implementing actions that conform to CCA policies. Until an agency has a fully certified Local Coastal Program, the CCC is responsible for issuing coastal development permits.

Under the CCA, Section 30107.5 labels environmentally sensitive habitat areas are areas in the Coastal Zone "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

Section 30240 of the CCA states:

- Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

In addition, the CCC regulates impacts on coastal wetlands defined in Section 30121 of the CCA as "lands in the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." Under the CCC's definition of wetlands (refer to California Code of Regulations, Section 13577[b]), a wetland need only display one of the parameters typically used to define wetland areas, in contrast to the USACE, which uses a three-parameter definition under its federal authorities. The CCA requires that most development avoid and buffer coastal wetland resources in accordance with Sections 301231 and 30233, including limiting the filling of wetlands to certain allowable uses. Portions of the project area are in the Coastal Zone and, therefore, are subject to the CCA.

### California Endangered Species Act (California Fish and Game Code, Section 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under CESA. For projects that would affect a listed species under both CESA and FESA, compliance with FESA would satisfy CESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with CESA under the California Fish and Game Code (CFGC), Section 2080.1. For projects that would result in take of a species only listed under CESA, the project proponent must apply for a take permit under Section 2081(b).

### California Environmental Quality Act Guidelines, Section 15380(b)

Although threatened and endangered species are protected by specific federal and state statutes, California Environmental Quality Act (CEQA) Guidelines, Section 15380(b), provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the rare or endangered species definition in FESA and Sections 2050 through 2059.26 of the CFGC dealing with rare or endangered plants and wildlife. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either the USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not currently have legal protection of any kind, CEQA calls for an assessment of if any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed as sensitive by the California Natural Diversity Database are considered by the CDFW to be significant resources and fall under the CEQA Guidelines to address impacts. Local planning documents, such as General Plans, often identify these resources as well.

### California Fish and Game Code, Section 1602

Under this section of the CFGC, the project proponent is required to notify the CDFW before the start of any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the CFGC, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel that has banks and supports fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that

supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. The CDFW also has jurisdiction over dry washes that carry water during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, the CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a streambed alteration agreement, which becomes part of the plans, specifications, and bid documents for the project.

### California Fish and Game Code, Sections 2080 and 2081

Section 2080 of the CFGC states that "no person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [California Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081 of the CFGC, the CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding if the take is incidental to an otherwise lawful activity, the impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by the CDFW.

### California Fish and Game Code, Sections 3503, 3503.5, 3513, and 3800

Section 3503 of the CFGC states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptor (i.e., species in the orders Falconiformes and Strigiformes), including nests or eggs. Typical violations of the CFGC include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Section 3513 of the CFGC upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA.

Section 3800 of the CFGC affords protection to nongame birds, which are birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds.

### California Fish and Game Code, Sections 3511, 4700, 5050, and 5515

California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the CFGC. These statutes prohibit take or possession of fully protected species. The CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species, except very limited project types.

### California Wetland Definition

California has adopted the Cowardin et al. (1992) definition of "wetlands." For this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (at least 50 percent of the aerial vegetative cover); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and saturated with water or covered by shallow water at some time during the growing season of each year.

Under normal circumstances, the federal definition of wetlands requires all three wetland identification parameters to be met, whereas the Cowardin et al. (1992) definition requires the presence of at least one of these parameters. For this reason, identification of wetlands by state agencies consists of the union of all areas that are periodically inundated or saturated or in which at least seasonal dominance by hydrophytes may be documented or in which hydric soils are present.

### Natural Communities Conservation Planning Act (California Fish and Game Code, Section 2800)

The Natural Communities Conservation Planning (NCCP) program is a cooperative effort to protect habitats and species. It began under the state's NCCP Act of 1991 and is broader in its orientation and objectives than CESA or FESA. These laws are designed to identify and protect individual species that have already declined significantly in number. The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

This voluntary program allows the state to enter into planning agreements with landowners, local governments, and other stakeholders to prepare plans that identify the most important areas for a threatened or endangered species and the areas that may be less important. These NCCP Plans may become the basis for a state permit to take threatened and endangered species in exchange for conserving their habitat. The CDFW and USFWS worked to combine the NCCP program with the federal Habitat Conservation Plan process to provide take permits for state and federally listed species. Under the NCCP Act, local governments can take the lead in developing these NCCP Plans and become the recipients of state and federal take permits.

### Native Plant Protection Act (California Fish and Game Code, Sections 1900–1913)

California's Native Plant Protection Act requires state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the act prohibit the take of listed plants from the wild and require notification to the CDFW at least 10 days in advance of any change in land use. This allows the CDFW to salvage listed plant species that would otherwise be destroyed. The project proponent is required to conduct botanical inventories and consult with the CDFW during project planning to comply with the provisions of the act and sections of CEQA that apply to rare or endangered plants.

### Porter-Cologne Water Quality Control Act (California Water Code, Division 7)

The State Water Resources Control Board works in coordination with the nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the state's Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The Porter-Cologne Act broadly defines "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]).

Under the Porter-Cologne Act, the State Water Resources Control Board, and the nine RWQCBs also have the responsibility of granting CWA National Pollutant Discharge Elimination System permits and waste discharge requirements for point-source and nonpoint-source discharges to waters. These regulations limit impacts on aquatic and riparian habitats from various urban sources.

#### 4.4.1.3 Local

### 2010 General Plan (Inland)

#### *Land Use Element*

The 2010 General Plan Land Use Element includes goals and policies for orderly growth that is compatible with and limits development in natural resource areas, including sensitive vegetation communities, aquatic resources, and wildlife habitat, in the County (Goal LU-1 and Policies LU-1.5, LU-1.13). The Element also includes goals and policies establishing land use designations for the County's sensitive natural areas (Goal LU-2 and Policies LU-2.2, LU-2.34[c]) and encourages the provision of open space to protect and conserve biological resources in the County (Goal LU-7, Policy LU-7.2, Goal LU-8, and Policies LU-8.4 through LU-8.6).

#### *Conservation and Open Space Element*

The 2010 General Plan Conservation and Open Space Element includes goals and policies to project and conserve natural environments, listed species, and critical habitat (Goal OS-4 and Policies OS-4.1 through OS-4.3). This Element also includes goals and policies establishing

requirements for development to avoid, minimize, and mitigate for impacts on the sensitive biological resources in the County (Goal OS-5 and Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24 and OS-5.25).

## Area and Master Plans

In addition to the above General Plan goals and policies, the following Area and Master Plans have supplemental policies related to biological resources:

### *Carmel Valley Master Plan*

Policies CV-1.3, CV-3.4, CV-3.7 through CV-3.12, and CV-3.15 of the Carmel Valley Master Plan require the provision of open space, minimization of hillside and natural landform alteration, and support the protection and preservation of biological resources in the planning area. In particular, Policy CV-3.7 requires that areas of biological significance are identified and preserved as open space.

### *Central Salinas Valley Area Plan*

This area plan does not include supplemental policies to the General Plan that are applicable to biological resources.

### *Greater Monterey Peninsula Area Plan*

Policies GMP-1.5 and GMP-3.5 through GMP-3.10 of the Greater Monterey Peninsula Area Plan limit types of development in environmentally sensitive areas and prescribes setback requirements for wetlands in the planning area. Protection and preservation of native trees, open space, wetlands, plant and wildlife species (including marine birds and mammals), and critical habitats are included in these Policies as well.

### *Fort Ord Master Plan*

#### Land Use Element

The Fort Ord Master Plan Land Use Element Goal supports planned development that balances opportunities for growth with environmental protection. Specific to biological resources, the Recreation/Open Space Land Use Objectives A and B and Policies A-1, B-1, and B-2 encourage conservations and preservation of natural resources and open space, including establishing linkages and buffers for open space areas.

#### Recreation and Open Space Element

The Fort Ord Master Plan Recreation and Open Space Element Objectives A and C and Policies C-1 and C-2 integrates the Fort Ord open space into existing regional open space and promotes the

goals of the Habitat Management Plan through establishment of an oak tree protection program and the ongoing maintenance and preservation of sensitive resources.

#### Conservation Element

The Fort Ord Master Plan Conservation Element specifies objectives and policies pertaining to protection and preservation of Hydrology and Water Quality (Objective C) and Biological Resources (Objective A through E) in the planning area. Hydrology and Water Quality Objective C and Policies C-2 and C-4 through C-6 outline requirements for development and facilities operations to avoid impacts on waterways, including the Monterey Bay and intertidal environments. Biological Resources Objective A and Policies A-1, A-5, A-6, and A-9 require conformance with the Fort Ord Habitat Management Plan habitat preservation, protection, and management. Biological Resources Objectives B and C and Policies B-1 through B-3 and C-1 through C-3 require avoidance and minimization of sensitive species and habitats not addressed in the Habitat Management Plan as well as natural land features and habitats like native oak trees and woodlands. Biological Resources Objectives D and E and Policies D-1 and E-2 include requirements for the promotion of educational programming and monitoring of activities in sensitive natural areas.

### *Greater Salinas Area Plan*

#### Conservation/Open Space

The Greater Salinas Area Plan Conservation/Open Space Policy GS-3.1 encourages avoidance of disturbance for all vegetation on land exceeding 25 percent slope, particularly chaparral and broad leaf evergreen, to minimize erosion and retain important visual amenities.

### *North County Area Plan (Inland)*

#### Conservation/Open Space

The North County Area Plan Conservation/Open Space Policies NC-3.3 through NC-3.5 prioritizes conservation of native vegetation and native oak and madrone trees, and encourages the preservation of critical habitat as open space.

### *Toro Area Plan*

#### Conservation/Open Space

The Toro Area Plan Conservation/Open Space Policies T-3.5 and T-3.7 outline requirements for outdoor lighting to preserve the quality of darkness and discourage the removal of healthy native oak trees.

## Community Plans

In addition to the above General Plan and Area and Master Plans goals and policies, the following Community Plan has supplemental goals policies related to biological resources:

### *Castroville Community Plan*

#### Resource Protection and Enhancement

The Castroville Community Plan Resource Protection and Enhancement Goal 5 and Policy 5.1 encourage the protection and enhancement of natural resources, including sloughs in the planning area.

## Monterey County Local Coastal Program – Land Use Plans

The Coastal Act requires local governments to prepare Local Coastal Programs (LCPs) consistent with the Coastal Act (California Public Resources Code, Section 30000 et seq.) for the portion of the statewide Coastal Zone located within their jurisdiction.

A portion of Monterey County is designated as a "Coastal Zone." The Coastal Zone of the County is divided into four areas governed by Land Use Plans (LUP) and Coastal Implementation Plans (CIP), which together comprise the LCP for Monterey County.

The four LUPs include the following:

- North County Land Use Plan
- Big Sur Coast Area Land Use Plan
- Carmel Area Land Use Plan
- Del Monte Forest Land Use Plan

The County is the main authority for issuing most coastal development permits in the County's coastal areas, with the CCC retaining jurisdiction over specific areas, such as tidelands, public trust lands, and state parks. Additionally, the Commission holds appellate authority over certain categories of development, ensuring compliance with broader coastal policies.

The CIPs establish various development regulations, standards, and procedures to implement the policies of the LUPs.

Under the Monterey County LCP, the LUPs policies and recommended actions that apply to the biological resources, including sensitive vegetation communities, aquatic resources, and wildlife habitat, in the project area are detailed in the sections below.

### *North County Land Use Plan (Coastal)*

The Resource Management Key Policy 2.3.1, General Policies 2.3.2, and Specific Policies 2.3.3 of the North County Land Use Plan support the protection, maintenance, enhancement, and

restoration of environmentally sensitive habitats in the planning area. For instance, Specific Policies 2.3.3 limits public access to areas of rare, endangered and sensitive plants and protects environmentally sensitive habitats from livestock grazing and fuel reduction programs. Provisions for the protection of riparian, wetland, aquatic habitats, terrestrial wildlife, and marine resources are also included in Specific Policies 2.3.3. Key Policy 2.4.1, General Policies 2.4.2, and Specific Policies 2.4.3 supports the protection of important biological habitats, drainage patterns, and the scenic character of coastal, river, and estuarine shorelines from diking, dredging, and filling activities. The quality of water resources in the planning area is protected under Key Policy 2.5.1, General Policies 2.5.2, and Specific Policies 2.5.3.

#### *Carmel Area Land Use Plan*

The Resource Management Key Policy 2.3.2, General Policies 2.3.3, and Specific Policies 2.3.4 of the Carmel Area Land Use Plan support the protection, maintenance, enhancement, and restoration of environmentally sensitive habitats in the planning area. For instance, Specific Policies 2.3.4 limits the use of and access to rare and sensitive terrestrial plant and wildlife habitats, including riparian corridors, Monterey cypress, Monterey pine, and coast redwood forest, and establishes setbacks from streams and riparian communities. Provisions for the protection of marine habitats are also included in Specific Policies 2.3.4. Key Policy 2.4.2, General Policies 2.4.3, and Specific Policies 2.4.4 support the protection of water resources like rivers and streams. Scenic and natural resources in the planning area are protected by limiting the density of new development and public access, including maintenance and creation of trails, under Key Policies 4.4.1 and 5.3.1, General Policies 4.4.2, and Specific Policies 4.4.3 and 5.3.3.

### Monterey County Code

The Monterey County Code (County Code) ordinances applicable to biological resources in Monterey County inland and coastal areas are described in the sections below. Of the County ordinances listed below, those that are applicable to biological resources in the Monterey County Coastal Zone include: Title 16 Environment (Chapters 16.08 Grading, 16.12 Erosion Control, 16.14 Urban Stormwater Quality Management and Discharge Control, and 16.16 Regulation for Flood Plains in Monterey County); and Title 20 Coastal Zoning.

#### *Title 16 – Environment*

##### Chapter 16.08 – Grading.

This ordinance sets forth rules and regulations to control all grading, establishes the administration procedure for issuance of permits, and provides for approval of plans and inspections of grading construction to minimize erosion, protect fish and wildlife, and to otherwise protect the natural environment of Monterey County.

**Chapter 16.12 – Erosion Control.**

This ordinance specifies requirements to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, loss of fish habitat, damage to property, loss of topsoil or vegetation cover, disruption of water supply, increased danger from flooding.

**Chapter 16.14 – Urban Stormwater Quality Management and Discharge Control.**

This ordinance provides the County with the legal authority to control the entry of urban pollutants into stormwater runoff that may enter the County storm drain system and enhance watercourses within the unincorporated urbanized areas in compliance with the CWA and the Porter-Cologne Act.

**Chapter 16.16 – Regulations for Floodplains in Monterey County.**

This ordinance specifies regulations for floodplains in UMC. The purpose of the ordinance is to minimize public and private losses due to flood conditions in specific areas and is a requirement for continued participation in the Federal Emergency Management Agency (FEMA) National Flood Insurance Program.

### *Title 20 – Coastal Zoning*

Section 20.66.020 of the Coastal Zoning Ordinance refers to Part 2 (North County) and Part 4 (Carmel) of the Monterey County CIP for standards for environmentally sensitive habitats.

### *Coastal Implementation Plan*

North County (Part 2) 20.144.040 (Environmentally Sensitive Habitat Development Standards) of the Coastal Implementation Plan provides development standards that support the protection, maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats in the planning area. This section requires a biological survey for proposed development that meets a set of criteria related to proximity to environmentally sensitive habitats and outlines general and specific development standards that aim to protect sensitive resources, including terrestrial plant and wildlife habitats, riparian, wetland and aquatic habitats, and marine habitats.

North County (Part 2) Section 20.144.050 (Forest Resource Development Standards) of the Coastal Implementation Plan requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forester's Assessment and Recommendation shall be required for removal of three or more trees requiring a coastal development permit or proposed as part of a development where the tree removal would otherwise require a coastal development permit. Section 20.144.050(C) provides specific development standards for tree removal activities.

Carmel Area (Part 4) 20.146.040 (Environmentally Sensitive Habitat Development Standards) of the Coastal Implementation Plan provides development standards that support the protection,

maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats in the planning area. This section requires a biological survey for all proposed development and outlines general and specific development standards that aim to protect sensitive resources, including terrestrial plant and wildlife habitats, riparian corridors, and wetland and marine habitats.

Carmel Area (Part 4) 20.146.050 (Water and Marine Resources Development Standards) of the Coastal Implementation Plan provides development standards that support the protection of protect the water quality of the coastal streams and the Point Lobos and Carmel Bay areas of Special Biological Significance in the planning area. This section requires adequate setbacks from streams, stream flow maintenance, performance controls for development site features, maintenance of water quality, protection of natural vegetation along streams and control of grading to minimize erosion and sedimentation.

Carmel Area (Part 4) Section 20.146.060 (Forest Resource Development Standards) of the Coastal Implementation Plan requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forest Management Plan is required for tree removal requiring a coastal development permit or for development requiring a coastal development permit where the development includes native tree removal of size or amount. Section 20.146.060(D) provides specific development standards for tree removal activities.

### *Title 21 – Zoning (Inland)*

#### Chapter 21.64.130 – Regulations for Land Use in the Carmel Valley Floodplain.

The purpose of this ordinance is to protect the Carmel River and its corridor including visual aspects, value as wildlife habitat and stabilize the river channel; preserve the rural character of Carmel Valley; and promote the public health and safety by lessening local flood potential and flood related hazards.

#### Chapter 21.64.260 – Preservation of Oak and Other Protected Trees.

The purpose of this ordinance is to provide the regulations for the protection and preservation oak and other specific types of trees as required in the Monterey County General Plan, Area Plans, and Master Plans. This ordinance also provides the procedures under which proposed removal of such trees may be considered or exempted.

#### Section 21.66.020, Standards for Environmentally Sensitive Habitats.

The purpose of this ordinance is to provide development standards which will allow for the protection, maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats. This provision requires a biological survey to be conducted as described below

in areas known by available resource information, review or other research, to contain environmentally sensitive habitats. Compliance with this provision is required as a condition of approval for projects in the County.

**Section 21.66.020 (C). Regulations: Biological Survey Requirement.**

1. A biological survey shall be required for all proposed development meeting one or more of the following criteria:
    a. The development is proposed within a known environmentally sensitive habitat, based on the most current resource maps, other reliable other available resource information, or through the planner's on-site investigation;
    b. The development is located within one hundred (100) feet of an environmentally sensitive habitat, and has potential negative impact on the long-term maintenance of the habitat.
2. The survey shall be required, submitted, and meet approval of the Director of Planning prior to the project application being determined complete.
3. The survey shall be prepared by a qualified biologist, as selected from the County's list of consulting biologists maintained by the Planning Department. Report preparation shall be at the applicant's expense.
4. The biological survey shall contain the following elements:
    a. Identify the property surveyed, with accompanying location map and site plan showing topography and all existing and proposed structures and roads, and the proposed project site or sites;
    b. Describe the method of survey;
    c. Identify the environmentally sensitive habitat found on the site and within one hundred (100) feet of the site with an accompanying map delineating the habitat location or locations.
    d. Describe and assess potential impacts of the development on the environmentally sensitive habitat(s) identified in the survey found on the site or on neighboring properties;
    e. Recommend mitigation measures which will reduce impacts;
    f. Assess whether the mitigation measures will reduce the development's impact to an insignificant level.

## 4.4.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to biological resources.

Biological resources documented as present or with potential to occur in the project area were identified through a review of existing maps, literature and other biological studies conducted in the

area, and sensitive species occurrence databases. Due to the programmatic nature of this project, no biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted for the project area. The results of this review provide information on the potential constraints to project development due to the presence of sensitive biological resources.

#### 4.4.2.1 Topography and Soils

Monterey County is bounded by the Pacific Ocean to the west and San Benito County to the east. The general topography varies throughout Monterey County and includes coastal bluffs, mountain ranges, and valleys. The Monterey County lies within several quadrangles of the California Geological Survey Map, including but not limited to the Salinas, Monterey, and Seaside Quadrangles. The three active faults in Monterey County are the San Andreas Fault, Palo Colorado-San Gregorio Zone, and Monterey Bay Fault Zone (OES 2022). The faults within Monterey County are discussed in detail in PEIR Chapter 7, Effects Found Not to Be Significant, Section 7.1, Geology and Soils.

The UMC has varied terrain and geology, ranging from sea-level coastal plains along Monterey Bay to broad valleys and inland and coastal mountains. The Salinas Valley consists primarily of gentle slopes and agricultural lands. Various soil types are present, including alluvial valley soils, marine terrace soils, steep hillslope soils, and granitic-derived soils, among others. Development in the UMC is further constrained by soils that are susceptible to liquefaction (OES 2022). Portions of UMC are also susceptible to landslides, expansive soils, shallow bedrock, and subsidence. Some valley floor soils, such as alluvial soils in the Salinas Valley, are at risk of settlement, and heavy groundwater pumping for agricultural production has contributed to subsidence in these areas. A total of 39 soil types are present on the opportunity sites in the project area (refer to Figures 4a through 4i, Soils Index, in the biological resources technical report [BRTR], which is included as Appendix G to the PEIR). Soil types related to agriculture and paleontological resources are discussed in PEIR Section 4.2, Agriculture and Forestry Resources, and Section 4.7, Geology and Soils (Paleontological Resources), respectively.

#### 4.4.2.2 Hydrology

Seven major watersheds span Monterey County under the responsibility of three different Regional Water Management Groups, based on watershed and jurisdictional boundaries. The seven major watersheds include Bolsa Nueva, Carmel River, Estero Bay, Estrella River, Pajaro River, Salinas River, and Santa Lucia. These watersheds drain west into the Pacific Ocean, with the Monterey Bay National Marine Sanctuary encompassing approximately 276 miles of shoreline, approximately 6,094 square statute miles, and extending an average of 30 miles offshore (NOAA 2026).

Important surface waters of these three Regional Water Management Groups are described in Section 4.10, Hydrology and Water Quality, Environmental Setting, Surface Water. They include

the Salinas River, San Antonio and Nacimiento Rivers and Reservoirs, Waterways originating in the Santa Lucia Range along the Big Sur coast, Elkhorn Slough and Moro Cojo Slough, and the Monterey Bay and the coastal waters of the Monterey Bay National Marine Sanctuary in the Greater Monterey County Integrated Regional Water Management (IRWM) region; the Carmel River, and the Los Padres Reservoir in the Monterey Peninsula IRWM region; Pajaro River in the Pajaro River Watershed IRWM region. Refer to Figure 4.10-1, Watersheds and IRWM Regions in Monterey County, and Figure 5, Hydrology, in the BRTR, which is included as Appendix G to the PEIR, for the major hydrologic features documented within the vicinity of the project area (USFWS 2026a; USGS 2026). Of the major hydrologic features documented in the project area, Elkhorn Slough, Pajaro River, and Salinas River are defined as traditional navigable waters by the USACE (USACE 2026). Many of the other major rivers and streams, as well as numerous creeks and drainages, are tributary to these traditional navigable waters or have direct connections to the Pacific Ocean.

#### 4.4.2.3 Climate

On a regional level, Monterey County has a Mediterranean climate, which is characterized by mild, wet winters and warm, dry summers, largely defined by the Pacific Ocean and the Santa Lucia Range. Habitats in this region include both mesic (moist) habitats, such as redwood forest, and xeric (dry) habitats, such as coastal scrub. Generalized climate in the region is characterized by warm, dry summers and cold, moist winters, which pushes the growing season to the wet months of the year (late winter to early spring). Vegetation often goes dormant (senescent) during the later summer months until initial rains start in the fall. The rainy season in Monterey County typically lasts from November through April and has an annual winter precipitation average of approximately 19 inches (Western Regional Climate Center 2026).

#### 4.4.2.4 Vegetation Communities and Land Cover Types

The project area consists of six vegetation communities and two land cover types, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, coastal scrub, agricultural land, and urban/developed land. The six vegetation communities documented in the project area as described below are considered sensitive (U.S. Forest Service 2026; Holland 1986). The two land cover types, agricultural land and urban/developed land, are not considered sensitive biological resources.

Vegetation community and land cover type boundaries for the project area were obtained in geographic information system (GIS) format from the U.S Forest Service geospatial dataset (U.S. Forest Service 2026). It is important to note that the U.S. Forest Service dataset is not updated on an annual basis, and there may be discrepancies in the boundaries or designations of the vegetation communities and land cover types due to recent development or natural processes changing the conditions of the project area.

Table 4.4-1, Vegetation Communities and Land Cover Types in the Project Area, presents the vegetation communities and land cover types for the project area. Figure 4.4-1, Vegetation and Land Cover – Index, and Figures 4.4-1a through 4.4-1i, Vegetation Communities and Land Cover, present the vegetation community and land cover type boundaries in the project area. The sensitive vegetation communities were designated as sensitive because of the general scarcity of the community; because impacts on the habitat are often regulated by the USFWS, CDFW, USACE, or RWQCB; or because of the species the vegetation community supports and the functions that it provides.

**Table 4.4-1. Vegetation Communities and Land Cover Types in the Project Area**

| Vegetation Community and Land Cover Type | Opportunity Site |
|---|---|
| **Wetlands and Waters (Aquatic Habitats)** | |
| Freshwater[1] | 11, 12, 13, 14, 15 |
| Freshwater Marsh[1] | 24, 56 |
| **Woodland and Forest** | |
| Mixed Conifer Forest[1] | 8, 16, 22, 37, 40, 43, 45, 46, 52 |
| Oak Woodland[1] | 8, 9, 10, 20, 21, 22, 31, 40, 46, 48, 52, 53, 56 |
| **Grassland** | |
| Annual Grassland | 1, 4, 8, 9, 10, 11, 12, 14, 15, 18, 19, 20, 21, 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, 52 |
| **Scrub** | |
| Coastal Scrub [1] | 22, 31, 44, 46, 47, 52, 53 |
| **Developed – Land Cover Types** | |
| Agricultural Land | 1, 2, 3, 4, 14, 15, 19, 20, 21, 22, 24, 25, 26, 37, 48, 50 |
| Urban/Developed Land | 1, 2, 3, 4, 5, 6, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 64 |

**Sources:** U.S. Forest Service 2026; Holland 1986.

**Notes:**

[1] Considered a sensitive vegetation community.

## Vegetation Communities

### *Wetland and Waters*

**Freshwater.** Freshwater includes year-round bodies of freshwater in the form of lakes, streams, ponds, or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10 percent vegetated cover. The freshwater in the project area may fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

**Freshwater Marsh.** Freshwater marsh documented in the project area generally corresponds to the coastal and valley freshwater marsh natural community type of Holland (Holland 1986). Coastal and valley freshwater marsh is dominated by freshwater emergent monocots often forming closed canopies. Dominant species include cattails (*Typha* spp.) and tules (*Schoenoplectus* spp.). Coastal and valley freshwater marsh occurs along the coast and in coastal valleys around river mouths and

the margins or lakes and springs, although it greatly reduced throughout its range due to urban development (Holland 1986). The freshwater marsh in the project area may fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

### *Woodland and Forest*

**Mixed Conifer Forest.** Mixed conifer forest documented in the project area generally corresponds to the coast range mixed coniferous forest natural community type of Holland (Holland 1986). Coast range mixed coniferous forest is a closed forest dominated by Ponderosa pine (*Pinus ponderosa*) and Douglas fir (*Pseudotsuga menziesii*), as well as sugar pine (*Pinus lambertiana*), California incense cedar (*Calocedrus decurrens*), and other broad-leaved trees. This community occurs primarily on mesic, well-drained sites with course but relatively moist soils. Coast range mixed coniferous forest is present between approximately 3,500 and 6,000 feet above mean sea level, primarily scattered on the summits of the Santa Lucia Range in Monterey County (Holland 1986).

**Oak Woodland.** Oak woodland documented in the project area generally corresponds to the interior live oak woodland natural community type of Holland (Holland 1986). Interior live oak woodland is a broad-leaved evergreen woodland dominated by interior live oak (*Quercus wislizeni*), with blue oak (*Quercus douglasii*), California buckeye (*Aesculus californica*), and California bay (*Umbellularia californica*) also being important component species. The dense canopy and persistent leaf litter of this community limits the herbaceous understory. Interior live oak woodland typically occurs on sloping to steep, north-facing hillsides below approximately 8,500 feet above mean sea level. This community is scattered in the California Coast Range, especially in Santa Cruz and Monterey Counties (Holland 1986).

### *Grassland*

**Annual Grassland.** Annual grassland documented in the project area generally corresponds to the non-native annual grassland natural community type of Holland (Holland 1986). Non-native annual grassland is a dense to sparse cover of annual grasses sometimes associated with numerous species of native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oat (*Avena* sp.), red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*Bromus diandrus*), barley (*Hordeum* sp.), and mustard (*Brassica* sp.). The majority of species and biomass in the non-native annual grassland community originated from the Mediterranean region, an area with a history of agriculture and a climate similar to California (Holland 1986).

### *Scrub*

**Coastal Scrub.** Coastal scrub documented in the project area generally corresponds to both the northern and central coastal scrub natural community types of Holland (Holland 1986). Coastal scrub is typified by densely growing low- to moderate-sized woody shrubs with small leathery evergreen leaves and small-diameter flexible branches. These shrubs are often relatively short-

lived with a shallow root structure and typically occur in dry, often rocky soils. The understory herbaceous cover can vary from dense to non-existent, depending on site conditions. Characteristic species include sagebrush (*Artemisia* sp.), coyote brush (*Baccharis pilularis*), ceanothus (*Ceanothus* sp.), California goldenbush (*Ericameria ericoides*), bush monkey flower (*Mimulus aurantiacus*), black sage (*Salvia mellifera*), lupin (*Lupinus* sp.), and Pacific poison oak (*Toxicodendron diversilobum*). In general, coastal scrub occurs on moderate to steep south-facing slopes in proximity to the Pacific Coast (Holland 1986).

### Land Cover Types

**Agricultural Land.** Agricultural land is not considered a vegetation community and is therefore not included as a natural community type described in Holland (Holland 1986). Agricultural land includes areas occupied by dairies and livestock feed yards or areas that have been tilled for use as croplands or groves and orchards.

**Urban/Developed Land.** Urban/developed land is not considered a vegetation community and is therefore not included as a natural community type described in Holland (Holland 1986). Urban/developed land represents areas that have been constructed on or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports various ornamental plants and landscaping.

#### 4.4.2.5 Wetlands and Waters

Wetlands and waters potentially subject to the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA, RWQCB pursuant to Section 401 of the CWA or the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the CDFW pursuant to Section 1600 et seq. of the CFGC occur in the project area. Aquatic and riparian vegetation communities (i.e., freshwater, freshwater marsh, and riparian forest) occur in the project area and may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW (refer to Figures 4.4-1a through 4.4-1i).

As described in Section 4.4.2.2, numerous major and minor aquatic features occur across the seven major watersheds in which the project area is located. This includes features that are defined by the USACE as traditional navigable waters, are tributaries, or have direct connections to the Pacific Ocean. Most of the rivers, streams, creeks, sloughs, and bays that occur in the project area are documented aquatic resources under the jurisdiction of the USACE, RWQCB, and CDFW, pursuant to Sections 404 and 401 of the CWA and Section 1602 of the CFGC, respectively. The wetlands and waters vegetation communities documented in the project area and described in Section 4.4.2.4, including freshwater and freshwater marsh, may also be under federal and state jurisdiction. In addition, wetland waters and non-wetland waters, including non-vegetated stream channels, erosional features, gullies, and concrete-lined channels, that occur in the project area

may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW. However, only these agencies can make a final determination of jurisdictional boundaries.

#### 4.4.2.6 Sensitive Plant and Wildlife Species

Sensitive species are those recognized by federal, state, or local agencies as being potentially vulnerable to impacts because of rarity, local or regional reductions in population numbers, isolation/restricted genetic flow, or other factors. Sensitive plant species include those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or those species included in the California Rare Plant Rank (CRPR) inventory, maintained by the California Native Plant Society (CNPS). Sensitive wildlife species include those listed as threatened or endangered, proposed for listing, candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or the CDFW Watch List (WL).

Based on the database search results which included a one-mile buffer in addition to the project area, 35 sensitive plant species and 26 sensitive wildlife species have been documented in the project area and have the potential to occur in the opportunity sites (refer to Figure 7, Historical Species with Potential to Occur – Index, and Figures 7a through 7i, in the BRTR, included as Appendix G to the PEIR). These species are listed in Table 4.4-2, Sensitive Plant Species Documented in the Project Area, and Table 4.4-3, Sensitive Wildlife Species Documented in the Project Area.

**Table 4.4-2. Sensitive Plant Species Documented in the Project Area**

| Scientific Name | Common Name | Federal/State/CRPR |
|---|---|---|
| *Allium hickmanii* | Hickman's onion | None/None/1B.2 |
| *Arctostaphylos hookeri* ssp. *hookeri* | Hooker's manzanita | None/None/1B.2 |
| *Arctostaphylos montereyensis* | Toro manzanita | None/None/1B.2 |
| *Arctostaphylos pajaroensis* | Pajaro manzanita | None/None/1B.1 |
| *Arctostaphylos pumila* | Sandmat manzanita | None/None/1B.2 |
| *Astragalus tener* var. *tener* | Alkali milk-vetch | None/None/1B.2 |
| *Castilleja ambigua* var. *insalutata* | Pink Johnny-nip | None/None/1B.1 |
| *Centromadia parryi* ssp. *congdonii* | Congdon's tarplant | None/None/1B.1 |
| *Chorizanthe minutiflora* | Fort Ord spineflower | None/None/1B.2 |
| *Chorizanthe pungens* var. *pungens* | Monterey spineflower | FT/None/1B.2 |
| *Clarkia jolonensis* | Jolon clarkia | None/None/1B.2 |
| *Cordylanthus rigidus* ssp. *littoralis* | Seaside bird's-beak | None/CE/1B.1 |
| *Delphinium californicum* ssp. *interius* | Hospital Canyon larkspur | None/None/1B.2 |
| *Delphinium umbraculorum* | Umbrella larkspur | None/None/1B.3 |
| *Ericameria fasciculata* | Eastwood's goldenbush | None/None/1B.1 |
| *Eryngium montereyense* | Fort Ord button-celery | None/None/1B.1 |
| *Erysimum ammophilum* | Sand-loving wallflower | None/None/1B.2 |
| *Fritillaria liliacea* | Fragrant fritillary | None/None/1B.2 |

**Table 4.4-2. Sensitive Plant Species Documented in the Project Area**

| Scientific Name | Common Name | Federal/State/CRPR |
|---|---|---|
| *Gilia tenuiflora* ssp. *arenaria* | Monterey gilia | FE/CT/1B.2 |
| *Holocarpha macradenia* | Santa Cruz tarplant | FT/CE/1B.1 |
| *Horkelia cuneata* var. *sericea* | Kellogg's horkelia | None/None/1B.1 |
| *Lupinus tidestromii* | Tidestrom's lupine | FE/CE/1B.1 |
| *Malacothamnus involucratus* | Carmel Valley bushmallow | None/None/1B.2 |
| *Malacothrix saxatilis* var. *arachnoidea* | Carmel Valley malacothrix | None/None/1B.2 |
| *Microseris paludosa* | Marsh microseris | None/None/1B.2 |
| *Monardella sinuata* ssp. *nigrescens* | Northern curly-leaved monardella | None/None/1B.2 |
| *Monolopia gracilens* | Woodland woollythreads | None/None/1B.2 |
| *Pinus radiata* | Monterey pine | None/None/1B.1 |
| *Piperia yadonii* | Yadon's rein orchid | FE/None/1B.1 |
| *Plagiobothrys chorisianus var. chorisianus* | Choris' popcornflower | None/None/1B.2 |
| *Rosa pinetorum* | Pine rose | None/None/1B.2 |
| *Stebbinsoseris decipiens* | Santa Cruz microseris | None/None/1B.2 |
| *Trifolium buckwestiorum* | Santa Cruz clover | None/None/1B.1 |
| *Trifolium polyodon* | Pacific Grove clover | None/Rare/1B.1 |
| *Trifolium trichocalyx* | Monterey clover | FE/CE/1B.1 |

**Sources:** Harris 2026.

**Notes:** CE = California endangered; CRPR = California Rare Plant Rank; CT = California threatened; FE = federally endangered; FT = federally threatened.

CRPR: 1B = rare, threatened, or endangered in California and elsewhere;.1 = seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);.2 = moderately threatened in California (20–80 percent occurrences threatened/moderate degree and immediacy of threat)

A total of 26 sensitive wildlife species (three invertebrates, two fish, six amphibians, four reptiles, five birds, and six mammals) have been documented in the project area and are listed in Table 4.4-3.

**Table 4.4-3. Sensitive Wildlife Species Documented in the Project Area**

| Species | | Status |
|---|---|---|
| **Scientific Name** | **Common Name** | **Federal/State** |
| **Invertebrates** | | |
| *Bombus occidentalis* | Western bumble bee | None/CCE |
| *Danaus plexippus plexippus* (pop. 1) | Monarch – California overwintering population | FC/None |
| *Euphilotes enoptes smithi* | Smith's blue butterfly | FE/None |
| **Fish** | | |
| *Lavinia exilicauda harengus* | Monterey hitch | None/SSC |
| *Oncorhynchus mykiss irideus (*pop. 9) | Steelhead – South-Central California coast DPS | FT/SSC |
| **Amphibians** | | |
| *Ambystoma californiense* (pop. 1) | California tiger salamander – Central California DPS | FT/CT, WL |
| *Ambystoma macrodactylum croceum* | Santa Cruz long-toed salamander | FE/CE, CFP |

**Table 4.4-3. Sensitive Wildlife Species Documented in the Project Area**

| Species | | Status |
|---|---|---|
| **Scientific Name** | **Common Name** | **Federal/State** |
| *Rana boylii* (pop. 6) | Foothill yellow-legged frog – South Coast DPS | FE/CE |
| *Rana draytonii* | California red-legged frog | FT/SSC |
| *Spea hammondii* | Western spadefoot | FPT/SSC |
| *Taricha torosa* | Coast Range newt | None/SSC |
| **Reptiles** | | |
| *Actinemys marmorata* | Northwestern pond turtle | FPT/SSC |
| *Actinemys pallida* | Southwestern pond turtle | FPT/SSC |
| *Anniella pulchra* | Northern California legless lizard | None/SSC |
| *Phrynosoma blainvillii* | Blainville's (coast) horned lizard | None/SSC |
| **Birds** | | |
| *Agelaius tricolor* | Tricolored blackbird | None/CT, SSC |
| *Athene cunicularia* | Western burrowing owl | None/CCE, SSC |
| *Coturnicops noveboracensis* | Yellow rail | None/SSC |
| *Eremophila alpestris actia* | California horned lark | None/WL |
| *Vireo bellii pusillus* | Least Bell's vireo | FE/CE |
| **Mammals** | | |
| *Corynorhinus townsendii* | Townsend's big-eared bat | None/SSC |
| *Neotoma macrotis luciana* | Monterey dusky-footed woodrat | None/SSC |
| *Puma concolor* | Mountain lion – Central Coast and Southern California DPS | None/CT |
| *Sorex ornatus salarius* | Monterey shrew | None/SSC |
| *Taxidea taxus* | American badger | None/SSC |
| *Vulpes macrotis mutica* | San Joaquin kit fox | FE/CT |

**Sources:** Harris 2026.

**Notes:** CCE = California candidate endangered; CE = California endangered; CFP= California fully protected; CT = California threatened; DPS = distinct population segment; FC = federal candidate for listing; FE = federally endangered; FPT = federally proposed threatened; FT= federally threatened; SSC = CDFW species of special concern; WL = CDFW watch list.

## Critical Habitat

Critical habitat is the specific areas within the geographic range occupied by the species that contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection (USFWS 2026b). A total of seven species have designated critical habitat mapped in the area surrounding opportunity sites: two plants and five wildlife species as listed below (Figure 4.4-2, Critical Habitat – Index, and Figures 4.4-2a through 4.4-2i, Critical Habitat) (CDFW 2026a, 2026b; USFWS 2026c; USFWS 2026d):

- Plants
  - Monterey spineflower – federally threatened, CRPR 1B.2
  - Santa Cruz tarplant – federally threatened, California endangered, CRPR 1B.1

- Wildlife
  - Invertebrates
    - Vernal pool fairy shrimp (Branchinecta lynchi) – federally threatened
  - Fish
    - Tidewater goby (Eucyclogobius newberryi) – federally endangered
  - Amphibians
    - California red-legged frog – federally threatened, CDFW SSC
    - California tiger salamander – federally threatened, California threatened, WL
  - Birds
    - Western snowy plover (Charadrius alexandrinus nivosus) – federally threatened

Only one designated critical habitat, for California red-legged frog, occurs within the opportunity sites, including Opportunity Sites 23, 36, 38, 55, and 56.

### Nesting Birds

The project area contains suitable nesting habitat for many bird and raptor species protected under the CFGC and the MBTA. The majority of habitat for nesting birds in the project area is in the innumerable native and ornamental trees, shrubs, and buildings of the developed land. The structures in the developed land could support nesting of certain species that use structures with eaves, ledges, crevices, cracks, and other "cavities," nest in or on utility structures, or nest on rooftops, such as black phoebe (*Sayornis nigricans*), gulls (*Larus* sp.), and Bewick's wren (*Thryomanes bewickii*).

Grassland- and ground-nesting species, such as the sensitive California horned lark and western burrowing owl documented in the project area, could nest in the annual grassland and open agricultural land throughout the project area. Freshwater marsh habitat in the project area provides potentially suitable nesting habitat for sensitive tricolored blackbird and yellow rail as well. The trees throughout the project area could support nesting by more common birds as well, including Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), and orioles (*Icterus* sp.), which often nest in ornamental palm and eucalyptus trees.

### Sensitive Roosting Bats

The project area contains suitable foraging and roosting habitat for sensitive bat species, including Townsend's big-eared bat, which was documented in the west-central portion of the project area as listed in Table 4.4-2 (refer to Figure 7 series in the BRTR, included as Appendix G to the PEIR). The structures in the developed land of the project area provide suitable roosting habitat for structure- and cavity-dwelling bats such as Townsend's big-eared bat and big brown bat (Eptesicus fuscus). The numerous native trees in the woodland and forest communities and the ornamental

trees throughout the developed land of the project area could provide suitable roosting habitat for tree-roosting bats, such as the hoary bat (*Lasiurus cinereus*) and western red bat (*Lasiurus blossevillii*). Western red bat is a CDFW species of special concern. The sources of open, freshwater throughout the project area provide suitable foraging habitat for bats roosting in the area that forage over sources of open water, such as the western mastiff bat (Eumops perotis).

#### 4.4.2.7 Wildlife Corridors and Habitat Linkages

Wildlife corridors provide routes for local movement and also regional linkages and corridors, often following linear topographic, vegetation, or water features. These corridors can be continuous habitats, or "stepping stone" areas, providing critical rest and foraging areas for birds traveling along migratory routes, for example. Local routes of movement provide constant connections to resources that include sources of water, home/cover sites, and foraging areas. Regional linkages and movement corridors provide larger patches of open space to allow relatively free movement of wildlife species along multiple paths between important resources. These areas allow for not only long-term genetic flow between subpopulations but also critical pathways of seasonal/migratory movements. Larger predatory mammals often use regional corridors for hunting and reproduction needs. Potential wildlife corridors can include streams, riparian areas, and culverts under roadways. Habitat characteristics considered included topography, habitat quality, and adjacent land uses.

The project area provides opportunities for wildlife movement and dispersal and provides connections to surrounding and nearby open space areas. In addition, the project area contains suitable nesting, foraging, and nursery sites for many wildlife species.

The major aquatic resources, including rivers, streams, lakes, sloughs, lagoons, and bays, as well as riparian corridors around many of these features, provide important wildlife movement corridors throughout the UMC. These areas function to facilitate amphibian, fish, reptile, bird, and mammal movement in the region. The network of mountain ranges that extend through the project area, including the Coastal Range, Diablo Range, Gabilan Range, Santa Lucia Range, and Temblor Range, also function as corridors for wildlife movement through the open space and native vegetation communities that occur in these areas.

The CDFW California Terrestrial Habitat Connectivity dataset documents most of the UMC as containing large contiguous natural areas and linkages or corridors that connect existing core natural areas (CDFW 2026c). The highest-quality terrestrial connectivity areas occur along the Pacific Coast south of Carmel to the southern edge of the UMC centering on the Santa Lucia Range and inland along the Coastal and Diablo Ranges. Fort Ord National Monument is connected to Carmel Valley and the Santa Lucia Range along the coast by large blocks of open space that function as movement corridors and habitat linkages as well. However, portions of the UMC have been identified as containing limited connectivity opportunity due to linear transportation corridors and urban

development, primarily along the U.S. Route 101 (also known as Highway 101) corridor between King City and Salinas and north along the Pacific Coast between Monterey and Santa Cruz (CDFW 2026c). Similarly, sections of the U.S. Route 101 corridor have been identified by CDFW as barriers to terrestrial wildlife connectivity in the UMC, including a portion of the highway between Salinas and Gilroy. These barriers disrupt an important coastal habitat linkage for medium and large mammals like badger (*Taxidea taxus*), bobcat (*Lynx rufus*), black bear (*Ursus americanus*), mountain lion (*Puma concolor*), and mule deer (*Odocoileus hemionus*), as well as amphibians like California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*) moving between the Santa Cruz Mountains and the Gabilans Range (CDFW 2026d).

The project area is also in the Pacific Flyway, the major migratory bird corridor of the western United States. Wildlife refuges and preserves have been designated in the UMC, including Salinas River National Wildlife Refuge and Carmel River Lagoon and Wetland Natural Preserve in the north and Morro Estuary Natural Preserve in the south, to provide rest stops along the annual migration routes for migratory bird species. The project area contains open space, native vegetation, and aquatic resources, and its position in the Pacific Flyway migratory corridor makes it very likely to provide habitat for migratory birds traveling between nesting and wintering areas.

The project area is likely to be used as a movement corridor for both sensitive and common wildlife species because of the native vegetation communities, undeveloped open space, Pacific Coast shoreline, inland mountainous regions, and numerous freshwater aquatic resources within and adjacent to the project area. Although transportation corridors and areas of urban development may impede some east–west wildlife movement in the northern portion of the UMC, the open space in most of the project area has the potential to provide important habitat connectivity both locally and regionally.

### 4.4.3 Method of Analysis

Biological resources documented as present or with potential to occur in the project area were identified through a review of existing maps, literature, and other biological studies conducted in the area, and sensitive species occurrence databases, including the following:

- Calflora Database (Calflora 2026)
- Consortium of California Herbaria database (CCH 2026)
- The CNPS Rare Plant Program Inventory of Rare Plants (CNPS 2026)
- California Natural Diversity Database (CDFW 2026a)
- CDFW Biogeographic Information and Observation System (CDFW 2026b)
- U.S. Department of Agriculture Soil Survey (USDA 2026a; 2026b)
- USFWS Information for Planning and Consultation (IPaC) (USFWS 2026c)
- USFWS NWI Wetlands Mapper (USFWS 2026a)
- USGS National Hydrography Dataset (NHD) (USGS 2026)

Due to the programmatic nature of this project, no biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted for the project area. The results of this review provide information on the potential constraints to project development due to the presence of sensitive biological resources.

### 4.4.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on biological resources if it would:

- **Threshold 1:** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- **Threshold 2:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- **Threshold 3:** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- **Threshold 4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- **Threshold 5:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **Threshold 6:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### 4.4.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to biological resources that could result from implementation of the project.

#### 4.4.5.1 Threshold 1: Candidate, Sensitive, or Special Status Species

**Threshold 1:** Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

## Impact Analysis

### *Sensitive Plant Species*

#### Direct Impacts

According to the historical literature and database search conducted for the project, a total of 35 sensitive plant species have been documented within the project area (refer to Table 4.4-2).

**Urban/developed Land and Agricultural Land.** Implementation of the project on opportunity sites comprised only of urban/developed land and agricultural land (Opportunity Sites 2, 3, 5, 6, 17, 23, 25 through 30, 33 through 36, 39, 41, 49, 50, 51, 54, 55, and 64; refer to Table 4.4-1) have a low potential to impact sensitive plant species because it provides little to no suitable habitat value for the sensitive plant species documented in the project area.

Implementation of the project on undeveloped opportunity sites or those that contain native vegetation communities have higher potential to impact sensitive plant species. While suitable habitats for the historically documented sensitive plant species are present in the project area, many of these species have specific microhabitat requirements, including soils and elevation range restrictions, that may reduce the potential for these species to occur on a particular site.

**Wetlands and Waters (Aquatic Habitats).** The aquatic habitats present in the project area (Opportunity Sites 11 through 15, 24, and 56; refer to Table 4.4-1), including freshwater and freshwater marsh, have the potential to support sensitive plant species documented in the project area, including Fort Ord button-celery (*Eryngium montereyense*).

**Woodland and Forest.** The woodland and forest communities of mixed conifer forest and oak woodland throughout the project area (Opportunity Sites 8, 9, 10, 16, 20, 21, 22, 31, 37, 40, 43, 45, 46, 48, 52, 53, and 56; refer to Table 4.4-1) have the potential to support sensitive plants documented in the project area, including but not limited to Hickman's onion (*Allium hickmanii*), Toro manzanita (*Arctostaphylos montereyensis*), sandmat manzanita (*Arctostaphylos pumila*), Kellogg's horkelia (*Horkelia cuneata* var. *sericea*), northern curly-leaved monardella (*Monardella sinuata* ssp. *nigrescens*), pine rose (*Rosa pinetorum*), Monterey pine (*Pinus radiata*), and Yadon's rein orchid (*Piperia yadonii*).

**Upland Vegetation Communities.** The upland vegetation communities of annual grassland and coastal scrub present in the project area (Opportunity Sites 1, 4, 8 through 12, 14, 15, 18, 19, 20, 21, 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, 52, and 53; refer to Table 4.4-1) provides suitable habitat for many of the same sensitive plant species supported by the woodland and forest communities listed previously, as well as Pajaro manzanita (*Arctostaphylos pajaroensis*), Jolon clarkia (*Clarkia jolonensis)*, Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Monterey spineflower (*Chorizanthe pungens* var. *pungens*), seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), fragrant fritillary

(*Fritillaria liliacea*), Santa Cruz microseris (*Stebbinsoseris decipiens*), and Pacific grove clover (*Trifolium polyodon*), among others.

As noted in Section 4.4.1.3 above, the project is required to implement a biological survey requirement in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of sensitive vegetation communities that could support sensitive plant species, including (but not limited to) Opportunity Sites 1, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 31, 32, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 52, 53, and 56 (totaling 32 opportunity sites), a biological survey is required to be conducted to determine the presence of sensitive vegetation communities and sensitive plant species. Refer to Table 4.4-1. Further, for these opportunity sites that are in the Carmel Area and North County Coastal Land Use Planning Areas, including Opportunity Sites 16, 43, and 48, projects would be regulated under Coastal Zoning Ordinance of the County Code. Project construction on these coastal sites would be required to comply with the provisions set forth in Section 20.66.020 of the of the County Code specific to coastal development in the Carmel Area and North County (Coastal). These provisions also require a biological survey for all proposed development in the Carmel Area and for development in North County (Coastal) that contains or is within proximity to sensitive habitats.

If the results of the biological survey required under County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and Mitigation Measure (MM-) BIO-OBJ-1 determine that sensitive plant species are not present and do not have a high potential to occur in the project opportunity sites, direct impacts on sensitive plant species would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat and avoidance is not feasible, direct impacts on sensitive plant species would be considered potentially significant without additional mitigation.

Therefore, MM-BIO-OBJ-1 and MM-BIO-CONS-2 have been provided to reduce potential impacts on sensitive plant species through conducting focused sensitive plant species surveys prior to construction of the project. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts on sensitive plant species through monitoring by a qualified biologist prior to and during construction of the project. Implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6 would require discretionary projects to conserve or restore vegetation communities potentially occupied by sensitive plant species. Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would be required to reduce potential direct impacts on sensitive plant species. Discretionary projects that streamline

under the Consistency Process, will, with implementation of the mitigation measures listed above, have their potential impacts to biological resources reduced to less than significant levels.

Projects requiring mitigation for temporary and permanent impacts to vegetation communities can streamline under the Objective Process even if the future residential project requires coordination with CDFW following entitlement, with implementation of MM-BIO-OBJ-1 and MM-BIO-OBJ-3. However, because state law and the HEU6 require certain uses by right, and the County is barred from requiring CEQA review for a "use by right", impacts on sensitive plant species from Objective Process projects would remain significant and unavoidable.[1] Refer to section 3.7.3, By-Right Development, for a discussion of use by right.

### *Indirect Impacts*

Temporary indirect impacts on sensitive plant species could result during project implementation, and may include dust, which could disrupt plant vitality in the short term, or construction-related soil erosion and runoff. Permanent edge effects, which are changes that occur at the boundary between two different communities or habitats (i.e., native habitat and urban/developed land), could result during operation of the project. These edge effects may include intrusions by humans and therefore possible trampling of individual plants, invasion by exotic plant and wildlife species, exposure to urban pollutants (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrologic changes (e.g., surface and groundwater level and quality).

Like the discussion under Sensitive Plant Species Direct Impacts, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), determine that sensitive plant species are not present and do not have a high potential to occur in the project opportunity sites, indirect impacts on sensitive plant species would be less than significant and no mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat, indirect impacts on sensitive plant species would be considered potentially significant without mitigation.

The project would be required to be in compliance with state and local regulations controlling erosion and stormwater runoff, including the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provisions, which would trigger preparation and compliance with an approved Stormwater Pollution Prevention Plan that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal

[1] The Notice of Availability published in the Monterey County Weekly (dated July 17, 2026) stated that impacts related to Biological Resources were less than significant with mitigation incorporated. This was erroneous. The Notice of Availability provided to the CEQA State Clearinghouse has been updated to note that impacts related to Biological Resources are significant and unavoidable, as described in this Section of the PEIR.

conditions to minimize any water quality and erosion impacts that could result during construction. In addition, the project would be subject to the County Code, Chapters 16.08 Grading, 16.12 Erosion Control, 16.14 Stormwater Control, and 16.16 Regulation for Flood Plains, which require implementation of BMPs to control the discharge of pollutants to the maximum extent practicable, compliance with the state Construction General Permit, elimination of non-stormwater discharges that are not in compliance with an applicable NPDES permit, and development and approval of a project-specific erosion control plan prior to the start of any grading or clearing. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on sensitive plant species from erosion, polluted runoff, and hydrologic changes would be less than significant, and no mitigation is required.

However, indirect impacts on sensitive plant species from edge effects and increased human activity could result. Therefore, indirect impacts on sensitive plant species during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would be required to reduce potential impacts, however, because the County is required to process certain uses by right the project could result in a significant and unavoidable impact.

### *Sensitive Wildlife Species*

#### Direct Impacts

A total of 26 sensitive wildlife species have been documented by historical literature and databased in the project area (refer to Table 4.4-3).

**Urban/developed Land.** Implementation of the project on opportunity sites comprised only of urban/developed land (Opportunity Sites 5, 6, 17, 23, 27 through 30, 33 through 36, 39, 41, 49, 51, 54, 55, and 64; refer to Table 4.4-1) has a low potential to impact sensitive wildlife species because it provides little to no suitable habitat value for the sensitive wildlife species documented in the project area. However, the ornamental trees and shrubs and structures present in the urban/developed land could provide suitable foraging and roosting habitat for sensitive bats documented in the project area, including Townsend's big-eared bat. Foraging and overwintering habitat for monarch butterfly could also be present in any large stands of ornamental trees, specifically coastal groves of eucalyptus, cypress, and pine, that occur in the urban/developed land. Direct impacts on the trees, shrubs, and structures in the urban/developed land of the project area could result in direct impacts on these species in the form of foraging, nesting, roosting, and overwintering habitat loss.

Implementation of the project on undeveloped opportunity sites or those that contain agricultural land and native vegetation communities have the potential to impact sensitive wildlife species.

**Agricultural Land.** Although the agricultural land throughout the project area (Opportunity Sites 1 through, 4, 14, 15, 19, 20, 21, 22, 24, 25, 26, 37, 48, and 50; refer to Table 4.4-1) is unlikely to support most of the historically documented sensitive wildlife species, species like western burrowing owl, American badger, and San Joaquin kit fox have adapted to frequently use highly cultivated and disturbed areas such as agricultural lands for burrowing (if suitable burrows and soil conditions are available) and as movement corridors.

**Wetlands and Waters (Aquatic Habitats).** The aquatic habitats present in the project area (Opportunity Sites 11 through 15, 24, and 56; refer to Table 4.4-1), including freshwater and freshwater marsh, have the potential to support sensitive fish and amphibian species documented in the project area, including Monterey hitch, Santa Cruz long-toed salamander, and California red-legged frog, among others. These aquatic communities also provide suitable habitat for sensitive reptiles like northwestern pond turtle and southwestern pond turtle, as well as nesting habitat for sensitive birds like tricolored blackbird and yellow rail.

**Woodland and Forest.** The woodland and forest communities of mixed conifer forest and oak woodland throughout the project area (Opportunity Sites 8, 9, 10, 16, 20, 21, 22, 31, 37, 40, 43, 45, 46, 48, 52, 53, and 56; refer to Table 4.4-1) support sensitive reptiles, birds, and mammals documented in the project area, including but not limited to Blainville's (coast) horned lizard, mountain lion, American badger, and Monterey dusky-footed woodrat.

No riparian forest habitat occurs in the opportunity sites. Therefore, no impacts would occur to the sensitive wildlife species potentially occurring in riparian forest habitat, including Santa Cruz long-toed salamander, foothill yellow-legged frog (South Coast DPS), Blainville's (coast) horned lizard, least Bell's vireo, American badger, Monterey dusky-footed woodrat, and Monterey shrew.

**Upland Vegetation Communities.** The upland vegetation communities of annual grassland and coastal scrub present in the project area (Opportunity Sites 1, 4, 8 through 12, 14, 15, 18 through 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, 52, and 53; refer to Table 4.4-1) provides suitable habitat for sensitive invertebrates, reptiles, birds, and mammals documented in the project area. These sensitive wildlife species include Smith's blue butterfly, coast range newt, western burrowing owl, California horned lark, mountain lion, American badger, Monterey shrew, and San Joaquin kit fox, among others.

As noted in Section 4.4.1.3 and discussed previously under Sensitive Plant Species, the project would implement a biological survey requirement in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2. Thus, prior to project construction on opportunity sites that contain sensitive vegetation communities or those that could support sensitive wildlife species (such as agricultural land), including Opportunity Sites 1 through 4, 8 through 16, 18 through 22, 24, 25, 26, 31, 32, 37,

38, 40, 42 through 48, 50, 52, 53, and 56, a biological survey would be conducted to determine the presence of sensitive vegetation communities and sensitive wildlife species.

If the results of the biological survey determine that sensitive wildlife species are not present and do not have a high potential to occur in the project opportunity sites, direct impacts on sensitive wildlife species would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat and avoidance is not feasible, direct impacts on sensitive wildlife species would be considered potentially significant without additional mitigation.

Therefore, MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required to reduce potential direct impacts on sensitive wildlife species through conducting sensitive bird and wildlife species focused surveys prior to construction. If impacts on sensitive wildlife species and their occupied habitats cannot be avoided, the biological resources survey and reporting shall identify all feasible measures to reduce impacts. Implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6 would be required to conserve and restore vegetation communities potentially occupied or used by sensitive wildlife species, thereby reducing impacts on wildlife species. Projects requiring mitigation for sensitive wildlife species and their occupied habitats can streamline under the Objective Process by identifying all sensitive habitat, the quality of that habitat, the presence or absence of sensitive wildlife species, and providing protective measures and adequate ratios for habitat replacement. Further, if "take" of a species is required by a project, that project must coordinate to obtain the necessary "take" permits with CDFW following entitlement. Discretionary projects that streamline under the Consistency Process, will, with implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6, have their potential impacts to biological resources reduced to less than significant levels. Additionally, implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts on sensitive wildlife species, such as sensitive roosting bats, through monitoring by a qualified biologist prior to and during construction of the project. Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-CONS-5, and MM-BIO-CONS-6 would be required to reduce potential direct impacts on sensitive wildlife species. However, because the County must process certain uses by right, the project would likely result in a potentially significant unavoidable impact.

#### Nesting Birds

The project area provides suitable nesting habitat for birds and raptors protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the project. If construction activities begin during the general bird and raptor nesting season (January 15 through September 15), the project would be required to implement regulations protecting sensitive nesting

birds, including the CFGC and MBTA. Furthermore, MM-BIO-OBJ-7 and MM-BIO-CONS-8 would require focused bird species surveys to determine presence/absence. If impacts cannot be avoided, MM-BIO-OBJ-7 and MM-BIO-CONS-8 would reduce potential impacts on nesting birds and raptors by requiring a no-disturbance buffer around any active nest. MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts through monitoring by a qualified biologist prior to and during construction of the project. Therefore, impacts on nesting birds and raptors would be less than significant with implementation of MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-OBJ-7, and MM-BIO-CONS-8.

#### Sensitive Roosting Bats

As previously discussed in Section 4.4.2.6, roosting habitat for sensitive bat species, including Townsend's big-eared bat and western red bat, occurs in the structures and trees throughout the project area. Although no focused nighttime mist-netting or acoustic surveys were conducted, the availability of suitable roosting with nearby foraging habitat suggests bats are likely roosting in the project area. Therefore, if sensitive roosting bats are present in the opportunity sites of the project area, potential impacts would be considered potentially significant without mitigation. If impacts cannot be avoided, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 would be required to reduce potential impacts on sensitive roosting bats through monitoring by a qualified biologist prior to and during construction and conducting sensitive wildlife species focused surveys prior to construction of the project. With implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4, impacts on sensitive roosting bats would be less than significant.

#### Critical Habitat

Critical habitat for Monterey spineflower, Santa Cruz tarplant, vernal pool fairy shrimp, tidewater goby, California red-legged frog, California tiger salamander, and western snowy plover occurs in the project area (Figures 4.4-2a through 4.4-2i). Although most of the critical habitat for these seven species (two plant species and five wildlife species) occur outside the opportunity sites in the project area, designated critical habitat for California red-legged frog occurs within the Opportunity Sites 23, 36, 38, 55, and 56 (Figure 4.4-2a through 4.4-2i). Therefore, potential impacts on this sensitive species in its designated critical habitat could occur during implementation of the project on these opportunity sites and would be considered potentially significant without mitigation.

Like the discussion under Sensitive Wildlife Species Direct Impacts, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine that suitable habitat for California red-legged frog is not present in the project opportunity sites where designated critical habitat is documented (including project Opportunity Sites 23, 36, 38, 55, and 56), direct impacts

on this sensitive species in its designated critical habitat would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that suitable California red-legged frog habitat is present in the project opportunity sites where designated critical habitat is documented, direct impacts on designated critical habitat for California red-legged frog would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would be required. However, because the County must process certain uses by right, the Objective Process could result in significant and unavoidable impacts at the programmatic level.

#### Indirect Impacts

Temporary construction-related and long-term operational indirect impacts on wildlife generally include lighting, increased human activity (including introduction of pets as predators), hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash and garbage, which can attract both introduced terrestrial and native terrestrial and bird predators (such as American crows, common ravens [*Corvus corax*], coyotes [*Canis latrans*], domestic dogs [*Canis familiaris*], raccoons [*Procyon lotor*], and striped skunks [*Mephitis mephitis*]). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species historically documented in the project area, identified in Section 4.4.2.6 and discussed above under Sensitive Wildlife Species, Direct Impacts.

As discussed in the section on Sensitive Wildlife Species, Direct Impacts, if the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2, finds that sensitive wildlife species are neither present nor have a high potential to occur in the project opportunity sites, indirect impacts on sensitive wildlife species would be less than significant; no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential to occur in or adjacent to the project opportunity sites due to available suitable habitat, indirect impacts on sensitive wildlife species could occur.

Indirect impacts on sensitive wildlife species from hydrologic changes, including erosion, stormwater runoff, and pollution discharges would be reduced through project compliance with NPDES Construction General Permit provisions and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Similarly, the project would conform with the County Code, Chapter 10.60, Noise Control, and implement BMPs for the use of noise- and vibration-emitting equipment during construction. Further, compliance with the County Code, Chapter 10.60, Noise Control, would restrict the hours

of construction activity and include a noise level limit to minimize disturbance from construction noise. Potential indirect impacts on sensitive wildlife species from new sources of lighting during construction and operation would be reduced through project compliance with County Code, Section 21.63.020, Design Guidelines for Exterior Lighting, which requires temporary construction lighting and permanent exterior lighting are unobtrusive, avoid off-site glare, and illuminate only the intended area.

However, indirect impacts on sensitive wildlife species from lighting, excessive noise and vibration, increased human activity, and potential predation by mesocarnivores attracted by trash and garbage could result. Therefore, indirect impacts on sensitive wildlife during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3, MM-BIO-CONS-4, (from Section 4.13, Noise) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction and BMPs to reduce construction noise and vibration in compliance with the County Code, Chapter 10.60, Noise Control.

## Significance of Impact

Potentially significant impact.

## Mitigation Measures

For by-right housing developments streamlining under the Objective Process, Mitigation Measures (MM) MM-BIO-OBJ-1, MM-BIO-OBJ-3, and MM-BIO-OBJ-7 shall be required to reduce potentially significant impacts on sensitive plant and wildlife species to the extent feasible. However, the County must process certain uses by right and cannot guarantee that impacts would be reduced to a level below significance.

For developments streamlining under the Consistency Process, MM-BIO-CONS-2, MM-BIO-CONS-4 through MM-BIO-CONS-6, and MM-BIO-CONS-8 shall be required to reduce potentially significant impacts on sensitive plant and wildlife species.

### *Sensitive Plant Species*

**MM-BIO-OBJ-1: Biological Resources Survey and Protection Measures**. Prior to subsequent project-level approval and prior to any construction or grading activities, as required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the Monterey County Code, applicants for projects streamlining under the Objective Process on opportunity sites shall retain a qualified biologist, as approved by the County of Monterey (County), to conduct a biological survey documenting the biological resources, including environmentally sensitive habitats, sensitive plant and wildlife species, and jurisdictional aquatic resources, found on the site and within 100 feet of the site.

As identified in California Department of Fish and Wildlife Section 1600 permit standards, the qualified biologist is an individual who holds, at a minimum, a bachelor's degree from an accredited university in a scientific field and shall:

- be knowledgeable and experienced in the biology and natural history of local plant and wildlife resources;
- be able to identify resources that are or have the potential to be present at the project site;
- have previous biological monitoring experience on construction projects;
- for any required nesting bird surveys, the biologist must have at least three years of field experience conducting general and protocol level surveys related to finding nests and monitoring them for the specific purpose of determining breeding status, egg incubation, chick maturity, and estimating fledge date;
- have the necessary experience and/or certifications for conducting protocol and focused surveys for species that may be present in the project area;
- when needed, have obtained the proper handling authorization documentation.

The project-specific biological evaluations shall be conducted using the best available scientific information, including documented species occurrences, applicable database records, habitat suitability, field reconnaissance, and project-specific site conditions, to evaluate the potential for sensitive, special-status, federally or state-listed, candidate, or otherwise protected species to occur on the site and within 100 feet of the site.

The qualified biologist shall document the survey results in a memorandum with maps, consistent with the requirements of Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), that is signed attesting that there are no sensitive biological resources present on the project site or that if present, they shall be avoided. The County shall review the memorandum and maps to confirm that no sensitive biological resources are present or that if present, they are avoided.

Where suitable habitat is present, sensitive species have the potential to occur, are documented within or adjacent to the project area, or are otherwise reasonably suspected to be present based on habitat conditions or field observations, the qualified biologist shall determine whether habitat assessments and species-specific focused and/or protocol surveys are warranted based on the project characteristics, anticipated impacts, applicable regulatory requirements, and current agency guidance. Where warranted, surveys shall be conducted in accordance with applicable federal, state, and local regulations, agency-approved protocols, and accepted scientific standards. Survey findings shall be used to determine species presence or probable absence and to inform project design, impact assessment, environmental compliance, agency consultation, permitting, monitoring, and any additional biological evaluation or regulatory actions, as required.

If sensitive biological resources are present on the project site but avoided by project design, a qualified biological resources monitor shall be present when earthwork is within 100 feet of the sensitive biological resource to avoid indirect impacts. Refer to MM BIO-OBJ-3, below, which outlines the biological resources monitoring requirements for projects that qualify for streamlining under the Objective Process.

A. **Demonstrate Conformance with 2010 General Plan and Land Use Plan Policies.** Within 2 years of certification of the PEIR, the County shall conduct a comprehensive review of applicable Goals and Policies in the 2010 General Plan and Land Use Plans for North County and Carmel Area related to Biological Resources. Based on that review, the County shall develop standardized checklists to demonstrate conformance with the identified Goals and Policies. The review shall also identify any Policies that are subjective or discretionary in nature. For such Policies, each standardized checklist shall provide clear criteria to demonstrate compliance. These standards will be required to be discussed in the required Biological Report. The review shall include all applicable topic areas, including but not limited to, the following:

- 2010 General Plan:
  i. *Conservation and Open Space Element* - Policies OS-4.1 through OS-4.3: Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24 and OS-5.25.
  ii. *Land Use Element* – Policies LU-1.5, LU-1.13, LU-2.34(c), LU-7.2, LU-8.4-LU-8.6
  iii. *Carmel Valley Master Plan* – CV-1.3, CV-33.4, CV-3.7 through CV-3.12 and CV-3.15
  iv. *Greater Monterey Peninsula Area Plan* – GMP-1.5, GMP-3.5 through GMP-3.10
  v. *Fort Ord Master Plan* – Land Use Element Policies A-1, B-1, and B-2, Recreation and Open Space Policies C-1 and C-2, Conservation Element Hydrology and Water Quality Policies C-2, C-4, C-6, A-1, A-5, A-6, and A-9; Biological Resources Policies A-1, A-5, A-6, A-9, B-1 through B-3, C-1 through C-3, D-1 and E-2
  vi. *Greater Salinas Area Plan* – Policy GS-3.1
  vii. *North County Area Plan* – Policy NC-3.3 through NC-3.5
  viii. *Toro Area Plan* – Policy T-3.5 and T-3.7
  ix. *Castroville Community Plan* – Policy 5.1
- Land Use Plan Policies:
  i. *North County Land Use Plan* - Key Policy 2.3.1, General Policies 2.3.2, and Specific Policies 2.3.3; Key Policy 2.4.1, General Policies 2.4.2,

and Specific Policies 2.4.3; Key Policy 2.5.1, General Policies 2.5.2, and Specific Policies 2.5.3

ii. *Carmel Area Land Use Plan* - Key Policy 2.3.2, General Policies 2.3.3, and Specific Policies 2.3.4; Specific Policies 2.3.4. Key Policy 2.4.2, General Policies 2.4.3, and Specific Policies 2.4.4; Key Policies 4.4.1 and 5.3.1, General Policies 4.4.2, and Specific Policies 4.4.3 and 5.3.3

B. Applicants for projects that qualify for streamlining under the Objective Process but that would result in unavoidable direct impacts to sensitive vegetation communities shall be required to acquire compensatory credits or implement habitat creation, restoration, enhancement, or preservation that comply with California Department of Fish and Wildlife (CDFW) authorizations at a minimum 1:1 ratio, or a ratio as defined in any state or federal permit(s) issued for the project. Compensatory credits are purchased to compensate for unavoidable impacts to aquatic resources and/or special status species and/or habitat through the conservation and protection of state and/or federally listed threatened, endangered species and/or habitat. Compensatory credits are purchased from banks approved by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, CDFW, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration-National Marine Fisheries Service, and/or State Water Resources Control Board.

   Such potential direct impacts shall be addressed by the applicant prior to both issuance of the first grading or construction permit and any vegetation clearing or ground-disturbing activities within the site-specific areas, pursuant to the below: Compensatory credits shall be redeemed through the acquisition of off-site bank credits via a resource agency-approved site within the site's specific watershed or by acquisition of other off-site credits. The qualified biologist shall provide substantial evidence that the acquisition of other off-site credits is adequate. Prior to implementation of project construction impacts (e.g., vegetation clearing or ground-disturbing activities) that would require the redemption of compensatory credits, documentation demonstrating the availability of such credits (i.e., credit ledger) at the agency-approved bank or other off-site credits must be submitted to the County of Monterey for confirmation.

   If credits are not available at either a resource agency-approved site within the site's specific watershed or off-site, implementation of habitat creation, restoration, enhancement, or preservation shall occur through a Habitat Monitoring Plan developed by a qualified biologist. Under this option, an applicant shall cause a Habitat Monitoring Plan to be prepared to achieve no net loss of the resource timed

in relation to project impacts. Such a plan shall also comply with applicable federal, state, and local requirements.

The Habitat Monitoring Plan shall include all of the following information:

- A Conceptual planting plan including planting zones, grading, and irrigation.
- A Seed mix/planting palette.
- Planting specifications.
- A Monitoring program prepared by a qualified biologist including success criteria to ensure no net loss of sensitive vegetation communities. Final success criteria shall be determined based on quality, quantity, and type of habitat impacted. The monitoring program shall include measures for adaptive management, detailing required remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, providing supplemental water, replanting, and herbivore deterrents/protections.

For measures that involve habitat acquisition, the Habitat Monitoring Plan shall include all of the following:

- The location of proposed acquisition.
- A description of the biological resources to be acquired, including support for the conclusion that the acquired habitat is adequate for the specific maintenance impact.
- Documentation that the area would be adequately preserved and maintained in perpetuity.

The identification of off-site credits shall be provided to the County of Monterey and shall include the following:

- The location of the approved site.
- A description of the off-site credits the applicant intends to acquire, including substantial evidence that the acquired habitat would be adequate to mitigate the project's specific maintenance impact.
- Documentation of the credits that are associated with a bank, which has been approved by the appropriate resource agencies.
- Documentation in the form of a current credit ledger.

The County shall approve the Habitat Management Plan if all conditions are met.

If "take" of sensitive habitat or species is required, the applicant shall both obtain an Incidental Take Permit from the California Department of Fish and Wildlife and/or US Fish and Wildlife Service and provide proof of such permit to the County prior to County issuance of the first grading or construction permit.

If the qualified biologist report does not identify adequate measures to replace sensitive habitat as detailed above, the project shall be moved into the Consistency Process, and shall follow MM-BIO-CONS-2, etc., below.

**MM-BIO-CONS-2: Biological Resources Survey**. Prior to subsequent project-level approval and prior to any construction or grading activities for discretionary housing developments streamlining under the Consistency Process, as required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the Monterey County Code, applicants shall retain a qualified biologist, as approved by the County of Monterey (County), to conduct a biological survey documenting the biological resources, including environmentally sensitive habitats, sensitive plant and wildlife species, and jurisdictional aquatic resources, found on the site and within 100 feet of the site.

Refer to MM-BIO-OBJ-1, above, for all standards and requirements for MM-BIO-CONS-2. If sensitive biological resources are present on the project site but cannot be avoided by project design, a qualified biological resources monitor shall be present when earthwork is in or within 100 feet of the sensitive biological resource to minimize impacts. Refer to MM-BIO-CONS-4, below, which outlines the biological resources monitoring requirements for projects that qualify for streamlining under the Consistency Process. For unavoidable impacts on sensitive plant and wildlife species habitats and sensitive vegetation communities, implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6, below, would be required to compensate for permanent impacts and restore temporary impacts on these habitats.

**MM-BIO-OBJ-3: Qualified Monitoring Biologist.** Prior to the start of construction activities for by-right housing developments streamlining under the Objective Process, as required by mitigation measures recommended by the biological survey report pursuant to County of Monterey Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1, a qualified monitoring biologist shall be retained to implement required monitoring. The qualified monitoring biologist shall be responsible for the following monitoring and reporting tasks:

a. **Biological Construction Monitoring Exhibit.** The qualified monitoring biologist shall submit a Biological Construction Monitoring Exhibit, which includes limits of work, proposed monitoring schedule, bird, focused sensitive species, or other wildlife surveys/survey schedules (including general bird nesting and U.S. Fish and Wildlife protocol), timing of surveys, bird construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the qualified monitoring biologist. The Biological Construction Monitoring Exhibit shall include the construction site plan, written and graphic depiction of the project's biological monitoring program, and a schedule for

construction activities. Where the potential for impacts on biological resources is limited (e.g., construction within a footprint that consists entirely of previously developed or disturbed lands), the Biological Construction Monitoring Exhibit may be limited to a pre- and post-maintenance verification inspection by a qualified biologist. For highly sensitive resource areas with documented sensitive biological and aquatic resources present, full-time biological monitors may be required, as determined by a qualified biologist. The Biological Construction Monitoring Exhibit shall be approved by the County of Monterey prior to the start of construction.

b. **Resource Marking/Protection.** Prior to the start of construction activities within the future site-specific project area, the qualified monitoring biologist shall supervise the placement of orange construction fencing or similar visible marker, staking, or flagging along the limits of the construction area adjacent to sensitive biological habitats, as shown on the Biological Construction Monitoring Exhibit to ensure crews remain within the approved construction limits. These demarcations shall not be required for areas with existing barriers, such as chain-link fencing, along the limits or facilities that are within or adjacent to developed and non-sensitive habitat areas. This task shall include flagging plant specimens and delineating buffers to protect sensitive biological resources (e.g., habitats, sensitive plant and wildlife species, including nesting birds) prior to construction.

c. **Cover Trenches.** The qualified monitoring biologist shall oversee the construction site so that cover and escape routes for wildlife from excavated areas shall be provided daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and if plastic sheeting is used, the edges must be covered with soils such that small wildlife cannot access the excavated hole. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and before sealing the exposed area) by the qualified monitoring biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route. The qualified monitoring biologist shall verify that the contractor has covered all steep-walled trenches or excavations prior to the end of construction daily. If wildlife species are encountered within any trenches or excavated areas, the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape (e.g., a ramp or sloped surface at no greater than a 30-degree angle) and allowed to disperse. In addition, the qualified monitoring biologist shall provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and

equipment and to use best judgment to avoid killing or injuring wildlife (refer to below section [e] of this MM-BIO-OBJ-3[f]).

d. **Structure and Tree Clearance.** Prior to the issuance of any permit to allow for the removal or demolition of trees and existing structures within the survey area (particularly any ornamental trees and existing buildings in the developed land areas), the qualified monitoring biologist shall conduct clearance surveys to flush out any wildlife species nesting, roosting, or otherwise occupying the trees or structures. If wildlife species are encountered within any of the trees or structures (outside the general bird nesting season), the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape and allow the species to disperse. If tree-roosting bats are suspected, slow removal by gently pushing the tree over with heavy equipment is required. All tree removal in inland areas shall be in accordance with the Monterey County Code, Chapter 16.60, Preservation of Oak and Other Protected Trees. All tree removal in coastal areas shall be in accordance with Section 20.146.060 of the Monterey County Coastal Implementation Plan, Regulations for Development in the Carmel Area Land Use Plan, and Section 20.144.050 of the Monterey County Coastal Implementation Plan, Regulations for Development in the North County Land Use Plan Area, including preparation of a Forest Management Plan, as applicable.

e. **Nighttime Lighting.** Prior to the start of any construction activity where the site plan for the construction area indicates that significant impacts on biological resources may occur, the qualified monitoring biologist shall confirm the planned construction activities are limited to between dawn and dusk to avoid the use of nighttime construction lighting and the resulting illumination of on-site and adjacent habitat areas. In the event that temporary nighttime construction lighting is necessary, the qualified monitoring biologist shall oversee the construction site so that all lighting is of the lowest illumination necessary for human safety, directed away from sensitive vegetation communities and habitat areas, and shielded to minimize light spillover outside of the designated work area.

f. **Pre-Construction Meeting/Education.** Prior to the start of any construction activity where the site plan for the construction area indicates that significant impacts on biological resources may occur, as determined by a qualified biologist, a pre-construction meeting shall be held on site with the following in attendance: County of Monterey project manager, the construction contractor (if applicable), and the qualified monitoring biologist. At this meeting, the qualified monitoring biologist shall identify and discuss the construction protocols that apply to the proposed activities and the sensitive nature of the adjacent habitat with appropriate project personnel.

   – At the pre-construction meeting, the qualified monitoring biologist shall submit to the County of Monterey representative and construction contractor a copy of the

Biological Construction Monitoring Exhibit that identifies areas to be protected, fenced, and monitored. This data shall include all buffer limits, if applicable.

- Prior to the start of construction activities, the qualified monitoring biologist shall meet with the construction contractor and crew and conduct an on-site educational session regarding the need to avoid impacts outside the approved construction footprint and to protect sensitive plants and wildlife that may occur at the specific facility. This may include but not be limited to explanations of the bird and wetland buffers, the flag system for removal of invasive species or retention of sensitive plants, and clarification of acceptable access routes/methods and staging areas.

g. **Regulatory Compliance Monitoring.** The qualified monitoring biologist shall conduct periodic compliance checks for construction activities to document compliance with applicable state and local regulations controlling erosion, stormwater runoff, fugitive dust, use of weed- and invasive-free erosion control materials, and excessive noise, including but not limited to, the National Pollutant Discharge Elimination System Construction General Permit provisions, an approved Stormwater Pollution Prevention Plan, erosion and dust control best management practices, and Monterey County Ordinances for stormwater, erosion control, and noise. The qualified monitoring biologist shall have authority to notify the construction contractor and require corrective actions as needed to maintain compliance with the above regulations.

h. **Biological Monitoring and Reporting.** The qualified monitoring biologist with stop work authority shall inspect/monitor the project construction area in accordance with the approved Biological Construction Monitoring Exhibit. This may be limited to pre- and post-maintenance inspections, weekly visits, or full-time monitoring, as determined by the qualified monitoring biologist and County of Monterey. If, during construction, the qualified monitoring biologist identifies sensitive habitat and/or a sensitive species that are neither avoided by design nor identified on the Biological Construction Monitoring Exhibit, or that were not identified in the initial survey and reporting required under MM-BIO-OBJ-1, the qualified biologist shall immediately stop work and notify the County. Work will not commence in the affected area until the County and, if required, a consulting wildlife agency,agree that the project would no longer have the potential to impact a sensitive biological resource.

i. **Documentation.** The qualified monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the County of Monterey project manager each month. However, if weekly reports are submitted as part of a separate agency permit requirement, these reports may be forwarded to the County of Monterey in place of Consultant Site Visit Record submittals.

j. **Final Monitoring Report.** If no deviations from the construction site plan occur during maintenance, no additional documentation is required. However, if deviations from the site plan do occur, such as unanticipated impacts on sensitive vegetation communities or unanticipated discharge of pollutants, a Final Monitoring Report shall be prepared within 3 months following the completion of mitigation monitoring detailing maintenance and monitoring that occurred, and any remedial or compensatory measures taken.

**MM-BIO-CONS-4: Qualified Monitoring Biologist.** Prior to the start of construction activities for discretionary developments streamlining under the Consistency Process, as required by mitigation measures recommended by the biological survey report pursuant to County of Monterey Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and Mitigation Measure (MM-) BIO-CONS-2, a qualified monitoring biologist shall be retained to implement required monitoring.

Refer to MM-BIO-OBJ-3, above, for all standards and requirements for MM-BIO-CONS-4.

**MM-BIO-CONS-5: Sensitive Vegetation Communities Impacts Mitigation.** Applicants for projects that qualify for streamlining under the Consistency Process that result in direct impacts on sensitive vegetation communities shall be required to provide mitigation to comply with California Department of Fish and Wildlife (CDFW) authorizations at a minimum 1:1 ratio, or as defined in any state or federal permit(s) issued for the project.

Potential direct impacts on sensitive vegetation communities resulting from discretionary project implementation shall be mitigated prior to subsequent project-level approval and prior to any vegetation clearing or ground-disturbing activities within the site-specific areas through one of the following two options:

1. Compensatory mitigation shall be satisfied through the acquisition of mitigation bank credits via a resource agency-approved mitigation site within the site's specific watershed or by acquisition of other off-site mitigation credits to be identified and selected in coordination with CDFW. Prior to implementation of project construction impacts (e.g., vegetation clearing or ground-disturbing activities) that would require compensatory mitigation, documentation demonstrating the availability of mitigation credits (i.e., credit ledger) at the approved mitigation site must be submitted to the County of Monterey for confirmation.
2. If credits are not available at a resource agency-approved mitigation site within the site's specific watershed or through other off-site mitigation credits, implementation of habitat creation, restoration, enhancement, or preservation shall

occur through a Habitat Mitigation and Monitoring Plan developed by a qualified biologist. Under this option, a Habitat Mitigation and Monitoring Plan shall be provided and prepared to achieve no net loss of the resource, be timed in relation to project impacts, and comply with federal and state mitigation requirements.

3. When proposed mitigation involves habitat enhancement, restoration, or creation, the Habitat Mitigation and Monitoring Plan shall include all of the following information:

    - Conceptual planting plan including planting zones, grading, and irrigation.
    - Seed mix/planting palette.
    - Planting specifications.
    - Monitoring program prepared by a qualified biologist including success criteria that ensure no net loss of sensitive vegetation communities. Final success criteria shall be determined based on quality, quantity, and type of habitat impacted and in consultation with CDFW. The monitoring program shall include measures for adaptive management plan detailing remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, supplemental water, replanting, and herbivore deterrents/protections.

    For mitigation that involves habitat acquisition, the Habitat Mitigation and Monitoring Plan shall include all of the following:

    - Location of proposed acquisition.
    - Description of the biological resources to be acquired, including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact.
    - Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

    The identification of mitigation site credits shall be provided to the County of Monterey and shall include the following:

    - Location of approved mitigation site.
    - Description of the mitigation credits to be acquired, including substantial evidence that the acquired habitat mitigates for the specific maintenance impact.
    - Documentation of the credits that are associated with a mitigation bank, which has been approved by the appropriate resource agencies.
    - Documentation in the form of a current mitigation credit ledger.

**MM-BIO-CONS-6: Habitat Restoration for Temporary Impacts.** Applicants for discretionary projects that qualify for streamlining under the Consistency Process that result in temporary impacts shall restore these areas to pre-construction topographic contours and conditions,

including the revegetation of native plant communities, where appropriate, following disturbance and prior to project completion. Habitat restoration and erosion control treatments shall be installed within these short-term impact areas. Habitat revegetation shall feature native species that are typical of the area, and associated erosion control best management practices shall include silt fence and microplastic- and weed-free straw fiber rolls, where appropriate. The revegetation areas shall be monitored and maintained by a qualified biologist or restoration specialist for 25 months to ensure adequate establishment and sustainability of the plantings/seedings.

Where a project activity involves potential disturbance of non-native invasive plant species (as identified by the California Invasive Plant Council), these plants shall be entirely removed immediately, where feasible, and the removal shall be monitored by the qualified monitoring biologist to ensure that dispersal of propagules (e.g., seeds and stems) are avoided or minimized. Where removal of plant roots is not feasible (e.g., where erosive flows are predicted), aboveground plant material shall be fully removed and monitored by the qualified monitoring biologist. Where aboveground plant material cannot be removed (e.g., due to limited access), herbicides shall be applied by a licensed pest control advisor, using chemicals permitted as safe within aquatic environments.

***Sensitive Wildlife Species***

**MM-BIO-OBJ-7: Focused Bird Species Surveys for Avoidance.** Project construction activities for by-right housing developments streamlining under the Objective Process that may directly (e.g., vegetation removal, clearing and grubbing, building demolition) or indirectly affect (noise, light, or ground vibration) nesting raptors and other protected bird species shall be timed to avoid the nesting season (February 1 through September 15). If Project activities occur within the nesting season, the qualified monitoring biologist shall conduct focused surveys for birds in suitable habitat to determine presence/absence. Surveys shall occur within seven (7) days prior to any construction or grading activities within the future site-specific project areas. Focused sensitive bird surveys shall be conducted during the species' specific nesting seasons to determine presence/absence within the development footprint plus a buffer, if recommended by the qualified monitoring biologist (refer to MM-BIO-OBJ-1 and MM-BIO-OBJ-3). The survey report shall map and describe the location and extent of observed sensitive bird species that would be impacted within the areas of potential effect for each project area. If no nesting birds are documented within the individual activity area, construction shall be allowed to proceed. If nesting birds cannot be completely avoided, a no-disturbance buffer shall be established around the active nest, the size of which will be determined by the qualified monitoring biologist based on species of bird and specific construction activities to take place. The size of the buffer can be reduced by

the qualified monitoring biologist in consultation with California Department of Fish and Wildlife. Any work within the buffer shall be avoided until the nest is inactive, as determined by the qualified monitoring biologist.

**MM-BIO-CONS-8: Focused Bird Species Surveys for Avoidance.** Project construction activities for discretionary developments streamlining under the Consistency Process that may directly (e.g., vegetation removal, clearing and grubbing, building demolition) or indirectly affect (noise, light, or ground vibration) nesting raptors and other protected bird species shall be timed to avoid the nesting season (February 1 through September 15). If Project activities occur within the nesting season, the qualified monitoring biologist shall conduct focused surveys for birds in suitable habitat to determine presence/absence. Surveys shall occur within seven (7) days prior to any construction or grading activities within the future site-specific project areas.

Refer to MM-BIO-OBJ-7 above, for all standards and requirements for MM-BIO-CONS-8.

Refer to Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

## Significance of Impact After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, conservation or restoration of sensitive vegetation communities potentially occupied by sensitive plant and wildlife species, and conducting focused surveys for sensitive bird species prior to construction. Further, under MM-BIO-OBJ-3 and MM-BIO-CONS-4 the biological monitor would be responsible for the following: preparation of an exhibit for monitoring, overseeing resource marking and protection, ensuring cover and escape routes for wildlife are provided, conducting clearance surveys for roosting bats and nesting birds, monitoring for nighttime lighting compliance, providing contractor environmental education, the ability to stop work, and conducting general compliance monitoring and reporting requirements. MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would require implementation of BMPs to reduce construction noise and vibration in compliance with County Code, Chapter 10.60, Noise Control. Impacts would be reduced below a level of significance for the Consistency Process. However, because the County must process certain uses by right, there is a potential that impacts to sensitive plant and wildlife species cannot be mitigated below a level of significance. Therefore, impacts on sensitive plant and wildlife species would be significant and unavoidable.

#### 4.4.5.2 Threshold 2: Riparian Habitat or Other Sensitive Natural Community

**Threshold 2:** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

### Impact Analysis

#### *Direct Impacts*

A total of six sensitive vegetation communities and two land cover types occur in the project area, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, coastal scrub, agricultural land, and urban/developed land. Construction activities on the project opportunity sites that contain or are within 100 feet of sensitive vegetation communities could result in potential impacts on these sensitive vegetation communities.

As noted in Section 4.4.1.3 and discussed in Section 4.4.5.1, the project, including by-right housing developments and developments streamlining under the Consistency Process on opportunity sites, would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of sensitive vegetation communities, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, and coastal scrub (including but not limited to Opportunity Sites 1, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 31, 32, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 52, 53, and 56), a biological survey would be required to determine the presence of sensitive vegetation communities.

If the results of the biological survey (MM-BIO-OBJ-1 and MM-BIO-CONS-2) determine sensitive vegetation communities are not present in or within 100 feet of the project opportunity sites, direct impacts on sensitive vegetation communities would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine sensitive vegetation communities occur in or within 100 feet of the opportunity sites, direct impacts on sensitive vegetation communities would be potentially significant without mitigation.

Impacts on opportunity sites comprised only of non-sensitive land cover types, including agricultural land and urban/developed land (Opportunity Sites 2, 3, 5, 6, 17, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 39, 41, 49, 50, 51, 54, 55, and 64), would not be considered significant or require habitat-based mitigation.

In the event sensitive vegetation communities are identified in the project opportunity sites and avoidance is not feasible, development of the project could result in potentially significant direct

impacts on sensitive vegetation communities, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, and coastal scrub. With implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 through MM-BIO-CONS-6, direct impacts on these sensitive vegetation communities would be reduced through monitoring by a qualified biologist, mitigating for acreage impacts through the Objective Process MM-BIO-OBJ-1[2] and Consistency Process MM-BIO-CONS-2, and restoring habitat for temporary impacts.

#### *Indirect Impacts*

Most of the indirect impacts on sensitive plant species described in Threshold 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts on sensitive vegetation communities. Like the discussion in Section 4.4.5.1, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine that sensitive vegetation communities do not occur in or within 100 feet of the project opportunity sites, indirect impacts on sensitive vegetation communities would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive vegetation communities are present in or within 100 feet of the project opportunity sites, indirect impacts on sensitive vegetation communities would be considered potentially significant without mitigation.

As previously discussed in Section 4.4.5.1, indirect impacts on sensitive vegetation communities from hydrologic changes, including erosion, stormwater runoff, and pollution discharges would be reduced through project compliance with NPDES Construction General Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs) and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on sensitive vegetation communities from erosion, polluted runoff, and hydrologic changes would be less than significant, and no mitigation is required.

However, indirect impacts on sensitive vegetation communities from edge effects and increased human activity during construction could result. Therefore, indirect impacts on sensitive vegetation communities during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction of the project.

[2] Mitigation is required through this PEIR. The Objective Process mitigation measures in this PEIR would be made a condition in the By-Right Housing Ordinance upon adoption, at which point Objective Process projects would be required to adhere to ordinance without additional future discretionary mitigation.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6.

### Significance of Impact After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, and conservation or restoration of sensitive vegetation communities. Impacts on sensitive vegetation communities for Consistency Process projects would be less than significant with mitigation incorporated. It is still possible that impacts on riparian habitat or other sensitive natural community could occur through projects subject to the Objective Process. As discussed in section 3.7.3, By-Right Development of this PEIR, the County must process certain uses by right, using objective criteria and no CEQA review, limitations that may result in significant impacts. Therefore, this impact would be significant and unavoidable.

#### 4.4.5.3 Threshold 3: State or Federally Protected Wetlands

**Threshold 3:** Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

### Impact Analysis

#### *Direct Impacts*

Aquatic resources that are identified by their characteristic vegetation communities, including freshwater (Opportunity Sites 11 through 15) and freshwater marsh (Opportunity Sites 24 and 56), occur in the project area and may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW. In addition, Opportunity Site 3 and 42 appear to occur within 100 feet of documented and potentially jurisdictional aquatic features and may be subject to additional environmental review under County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland).

As noted in Section 4.4.1.3 and discussed in Sections 4.4.5.1 and 4.4.5.2, the project, including by-right housing developments and developments streamlining under the Consistency Process on opportunity sites, would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of documented sensitive aquatic resources, including major rivers, creeks, and wetlands

(including but not limited to Opportunity Sites 3, 11 through 15, 24, 42 and 56), a biological survey would be conducted to determine the presence of jurisdictional aquatic resources.

If the results of the biological survey determine that jurisdictional aquatic resources are not present in or within 100 feet of the project opportunity sites, direct impacts on jurisdictional aquatic resources would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine jurisdictional aquatic resources occur in or within 100 feet of the opportunity sites, direct impacts on jurisdictional aquatic resources would be potentially significant without mitigation.

For Opportunity Sites 11 through 15 and 56, HEU6 proposes split zoning consisting of HDR/30 or HDR/25 and RC (Resource Conservation) designations to preserve sensitive resources and create a buffer between those resources and high-density residential development. However, where split zoning cannot entirely avoid development within sensitive aquatic vegetation communities, site-specific biological surveys and appropriate mitigation measures would still be required. In the event jurisdictional aquatic resources are identified and cannot be avoided by project development, a formal aquatic resources delineation and resource agency (USACE, CDFW, and RWQCB) approval of the mitigation strategy to compensate for impacts on jurisdictional aquatic resources through the permitting process would be required. Implementation of MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 would reduce direct impacts on jurisdictional aquatic resources through conducting an aquatic resource delineation and obtaining resource agency permits. With implementation of MM-BIO-OBJ-9 and MM-BIO-OBJ-11, qualifying projects may streamline under the Objective Process. If aquatic resources on the site do provide suitable habitat for sensitive plant or wildlife species, the protection measures in MM-BIO-OBJ-1 would be required.

#### *Indirect Impacts*

Most of the indirect impacts on sensitive plant species and sensitive vegetation communities described in Sections 4.4.5.1 and 4.4.5.2 also result in potentially significant indirect impacts on jurisdictional aquatic resources. Like the discussion in these sections, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine that jurisdictional aquatic resources do not occur in or within 100 feet of the project opportunity sites, indirect impacts on jurisdictional aquatic resources would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that jurisdictional aquatic resources are present in or within 100 feet of the project opportunity sites, indirect impacts on jurisdictional aquatic resources could occur.

As previously discussed in Section 4.4.5.1, indirect impacts on jurisdictional aquatic resources from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs) and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14 and 16.16, Regulation for Flood Plains. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on jurisdictional aquatic resources from erosion, polluted runoff, and hydrologic changes would be less than significant, and no additional mitigation would be required.

However, indirect impacts on jurisdictional aquatic resources from edge effects and increased human activity during construction could result. Therefore, indirect impacts on jurisdictional aquatic resources during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction of the project.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1 and MM-BIO-CONS-2.

**MM-BIO-OBJ-9: Aquatic Resources Delineation.** If potentially jurisdictional aquatic resources are identified within opportunity sites for by-right housing developments streamlining under the Objective Process during implementation of Mitigation Measure (MM-) BIO-OBJ-1 as pursuant to Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), or during any other surveys or monitoring, a qualified biologist shall conduct a formal aquatic resources delineation following the methods outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and applicable Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual to map the extent of wetlands and non-wetland waters, determine jurisdiction, and assess potential impacts. The results of the delineation shall be presented in an aquatic resources delineation report. The aquatic resources delineation report shall be used in consultation with the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for necessary authorization or permit, as described in MM-BIO-OBJ-11.

**MM-BIO-CONS-10: Aquatic Resources Delineation.** If potentially jurisdictional aquatic resources are identified within opportunity sites for developments streamlining under the Consistency Process during implementation of MM-BIO-CONS-2 as pursuant to

Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), or during any other surveys or monitoring, a qualified biologist shall conduct a formal aquatic resources delineation.

Refer to MM-BIO-OBJ-9, above, for all standards and requirements for MM-BIO-CONS-10.

**MM-BIO-OBJ-11: Potentially Jurisdictional Aquatic Resources Permitting.** Any by-right housing developments streamlining under the Objective Process that result in temporary and permanent impacts on the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall require authorization by the U.S. Army Corps of Engineers through the Section 404 Permit Program, by the Regional Water Quality Control Board through a 401 State Water Quality Certification, and by the California Department of Fish and Wildlife through a 1602 Streambed Alteration Agreement. Approved temporary and permanent impacts on the potentially federal and state jurisdictional aquatic resources in the project area may require compensatory mitigation through proposed on- or off-site habitat restoration, creation, or enhancement to the satisfaction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife to achieve a no-net loss of federal and state jurisdictional wetland and non-wetland waters. The permit(s) shall be submitted to the County prior to issuance of any permit for construction or grading.

**MM-BIO-CONS-12: Potentially Jurisdictional Aquatic Resources Permitting.** Any developments streamlining under the Consistency Process on opportunity sites that result in temporary and permanent impacts on the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall require authorization by the U.S. Army Corps of Engineers through the Section 404 Permit Program, by the Regional Water Quality Control Board through a 401 State Water Quality Certification, and by the California Department of Fish and Wildlife through a 1602 Streambed Alteration Agreement. The permit(s) shall be submitted to the County prior to issuance of any permit for construction or grading.

Refer to MM-BIO-OBJ-11, above, for all standards and requirements for MM-BIO-CONS-12.

## Significance of Impact After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 would require a pre-construction biological survey, a formal aquatic

resource delineation, and approval of resource agency permits. Therefore, impacts on jurisdictional aquatic resources would be less than significant with mitigation incorporated.

#### 4.4.5.4 Threshold 4: Wildlife Corridors and Wildlife Nursery Sites

**Threshold 4:** Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

### Impact Analysis

#### *Direct Impacts*

As discussed in Section 4.4.2.7, the project area is likely to be used as a wildlife movement corridor because it provides suitable nesting, foraging, nursery, and dispersal areas for both sensitive and common wildlife species due to the presence of native vegetation communities and its connection and proximity to the Pacific Coast and open waters to the west as well as mountain ranges to the east. The northern portion of the project area is adjacent to the Pacific Coast and there are numerous freshwater aquatic resources in and surrounding the project area, all of which function as a large-scale wildlife movement corridor for resident and migratory birds, large mammals, and aquatic species both locally and regionally. The residential and commercial development throughout much of the project area has the potential to limit wildlife movement through the project area. The woodland and forest communities in the project area in particular are high-quality, contiguous sections of these habitats that support movement and linkages to other habitats along the Pacific Coast and through the mountains to the east for both local and migratory species.

The project opportunity sites are proposed primarily in areas in and adjacent to existing development and would include temporary impacts that occur during construction activities on the sites. Although the project is not expected to have a significant impact on wildlife corridors and habitat linkages over the long-term, project activities may temporarily disrupt wildlife movement through the project area during construction.

As noted in Section 4.3.1.3 and discussed in Section 4.4.5.1, the project would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain sensitive vegetation communities or those that could support wildlife corridors and habitat connectivity (such as agricultural land), including Opportunity Sites 1 through 4, 8 through 16, 18 through 22, 24, 25, 26, 31, 32, 37, 38, 40, 42 through 48, 50, 52, 53, and 56, a biological survey would be conducted to determine if the site is used as a wildlife corridor or linkage to other sensitive habitats.

If the results of the biological survey determine the project opportunity sites do not function as wildlife corridors or habitat linkages, direct impacts would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine wildlife corridors and habitat linkages are present in the project opportunity sites and avoidance is not feasible, direct impacts would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required. Consistency Process mitigation would reduce impacts to a less than significant level. It is still possible that impacts to wildlife corridors, habitat linkages, and nursery sites could occur through the Objective Process. The County must process certain uses by right using objective criteria and without CEQA or discretion, which may result in significant impacts. Therefore, the impact would be significant and unavoidable.

#### *Indirect Impacts*

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 4.4.5.1 for indirect impacts on sensitive wildlife species. Like the discussion under Sensitive Wildlife Species Direct Impacts, if the results of the biological survey required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code and MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine the project opportunity sites do not contain or function as wildlife corridors and habitat linkages, indirect impacts on wildlife corridors and habitat linkages would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that wildlife corridors and habitat linkages occur in or are provided by the project opportunity sites, indirect impacts on sensitive wildlife species could occur.

As previously discussed in Section 4.4.5.1, indirect impacts on wildlife corridors and habitat linkages from hydrologic changes, including erosion, stormwater runoff, and pollution discharges would be reduced through project compliance with NPDES Construction General Permit provisions and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Similarly, the project would conform with the County Code Chapter 10.60 Noise Control and implement BMPs for the use of noise- and vibration-emitting equipment during construction. Further, compliance with the County Code, Chapter 10.60, Noise Control, would restrict the hours of construction activity and include a noise level limit to minimize disturbance from construction noise. Potential indirect impacts from new sources of lighting during construction and operation would be reduced through project compliance with the temporary construction lighting and permanent exterior lighting requirements in the County Code, Section 21.63.020, Design Guidelines for Exterior Lighting.

However, indirect impacts on wildlife corridors and habitat linkages from lighting, excessive noise and vibration, and increased human activity could result. Therefore, indirect impacts on wildlife corridors and habitat linkages would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required. Consistency Process mitigation would reduce impacts to a less than significant level. It is still possible that indirect impacts to wildlife corridors, habitat linkages, and nursery sites could occur through the Objective Process. The County must process certain uses by right using objective criteria and without CEQA or discretion, which may result in significant impacts. Therefore, the impact would be significant and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8.

### Significance of Impact After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, conservation or restoration of sensitive vegetation communities potentially occupied by sensitive plant and wildlife species, and conducting focused surveys for sensitive bird species prior to construction. Additionally, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would require implementation of BMPs to reduce construction noise and vibration in compliance with the Monterey County Noise Ordinance. However, because the County must process certain uses by right without discretionary permits or CEQA, impacts on wildlife corridors, habitat linkages, and nursery sites would be significant and unavoidable.

#### 4.4.5.5 Threshold 5: Local Policies or Ordinances Protecting Biological Resources

**Threshold 5:** Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

### Impact Analysis

The project would comply with local policies and ordinances protecting biological resources in the 2010 General Plan Land Use Element and Conservation and Open Space Element, Area Plans, Master Plans, Community Plans, the Monterey County Local Coastal Program LUP, and the

County Code (County of Monterey 2010). Section 4.4.1, Regulatory Setting, summarizes the goals and policies from these planning documents that are applicable to biological resources and implementation of the project. Further, as summarized in Section 4.4.1.3 and discussed in Sections 4.4.5.1 through 4.4.5.4, the project would comply with Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code that requires protection of environmentally sensitive habitats in both coastal and inland areas, including the implementation of a biological survey prior to project development (MM-BIO-OBJ-1 and MM-BIO-CONS-2).

As discussed in Section 4.4.5.3, the project would avoid, or if avoidance is not feasible, fully mitigate potential impacts on jurisdictional aquatic resources, thereby complying with the 2010 General Plan Conservation and Open Space Element Goal OS-4 and Policies OS-4.1 through OS-4.3, as well as policies from the Area and Master Plans that protect wetlands, like the Greater Monterey Peninsula Area Plan Policies GMP-3.6 and GMP-3.7, which require setbacks and protections for wetlands in the planning area. The project would also ensure that development be outside of the required setbacks of 200 feet from the top of bank of a river and 50 feet from the top of bank of a watercourse, unless certain conditions are met, as outlined in County Code, Section 16.16.050(K), Provisions for flood hazard reduction.

Sections 4.4.5.1 through 4.4.5.4 address the project's potential impacts on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages; which indicate that impacts would be potentially significant before incorporation of mitigation. However, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, (from Section 4.13) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would mitigate impacts to the extent feasible on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages, as discussed in those sections. Objective Process projects that would require a subdivision through either a tentative map, tentative parcel map, or parcel map would still be required to be consistent with the County's General Plan (2010 General Plan), Local Coastal Program (LCP), Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations.[3]

It is possible that future projects under the Objective Process would not require a subdivision pursuant to the Subdivision Map Act (e.g., tentative map, tentative parcel map, or parcel map). However, the Housing Accountability Act requires that projects with a "use by right" be consistent

[3] Pursuant to California Government Code, Section 66474, a legislative body shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the required findings, including that the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans, that the site is not physically suitable for the proposed density of development, and that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

with the objective General Plan, zoning, design, and subdivision standards for the site in effect at the time the project application was deemed complete.

However, because the Objective Process requires the County to consider projects objectively, requiring neither discretionary permits or CEQA review, the project could conflict with the 2010 General Plan Conservation and Open Space Element Goal OS-5 and Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24, and OS-5.25 regarding protection of sensitive plant and wildlife species, critical habitat, and sensitive vegetation communities in the project area. The Objective Process requires avoidance, minimization, and mitigation of impacts through both the By-Right Housing Ordinance and compliance with objective requirements to reduce impacts on sensitive biological resources. However, neither full mitigation nor consistency with applicable land use plans may be feasible because the County cannot condition or modify a project for environmental concerns.

Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, (from Section 4.1.3) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would reduce potentially significant impacts to the extent feasible. However, the County cannot ensure at this programmatic level that the project would not conflict with any of the previously mentioned local policies or ordinances protecting biological resources. Consistency Process projects would comply with relevant policies and conditions through the discretionary process. However, because the Objective Process and state law require a "use by right" without discretion or CEQA, impacts would be significant and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would mitigate direct and indirect

impacts to biological resources to the extent feasible. Because of the County's limited discretion to constrain a "use by right", this impact would be significant and unavoidable.

#### 4.4.5.6 Threshold 6: Habitat Conservation Plans and Natural Community Conservation Plans

**Threshold 6:** Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

### Impact Analysis

The project area is not within an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, no impacts on local or regional conservation plans would occur from implementation of the project and no mitigation is required.

### Significance of Impact

No impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

No impact.

## 4.4.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to biological resources that could result from implementation of the project.

As discussed in Chapter 4, Environmental Analysis, under the Cumulative Impacts subheading, the project identifies a theoretical buildout capacity on 56 opportunity sites as part of a planning effort to address regional population and housing needs. Therefore, environmental impacts analyses in this PEIR are inherently cumulative. However, considering site-specific nature of biological resources analysis, the cumulative project study area was defined within a local context and includes surrounding areas with similar biological resources.

### 4.4.6.1 Cumulative Threshold 1: Candidate, Sensitive, or Special Status Species

The cumulative project study area was defined within a local context and include surrounding areas with similar biological resources. Cumulative projects within the vicinity of the project area

would have the potential to result in impacts on sensitive plant and wildlife species, including the loss of habitat.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations that provide protections for sensitive plant and wildlife species, such as the FESA, CESA, and the California NCCP Act. In addition, some projects that impact sensitive species require approval from the USFWS and CDFW. If significant impacts occur from particular cumulative projects, then mitigation measures are implemented to reduce impacts to the extent feasible in compliance with CEQA.

As discussed in Section 4.4.5.1, development of the project would have the potential to impact sensitive plant and wildlife species. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 and obtain applicable approval from the CDFW and/or USFWS to reduce the project's impacts on sensitive plant and wildlife species. However, it is possible that cumulative projects include a "use by right", which would limit a jurisdiction's ability to fully mitigate impacts to below a level of significance. The project would result in a significant and unavoidable impact. Therefore, the project's contribution to impacts on sensitive plant and wildlife species would be cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Significant and unavoidable.

#### 4.4.6.2 Cumulative Threshold 2: Riparian Habitat or Other Sensitive Natural Community

Cumulative projects within the vicinity of the project area would have the potential to result in impacts associated with riparian habitat and other sensitive natural communities through direct and indirect loss or degradation.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program or the California NCCP Act. These programs provide protections for riparian and other sensitive habitats. In addition, many projects that affect riparian or other protected habitat types require approval from USFWS and CDFW. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible. However, it is possible that cumulative projects include a "use by right", which would limit a jurisdiction's ability to fully mitigate impacts to below a level of significance.

As discussed in Section 4.4.5.2, development of the project would have the potential to impact sensitive vegetation communities. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 to mitigate the project's impacts on riparian habitat or other sensitive communities to the extent feasible. Nevertheless, the project would still result in a significant and unavoidable cumulative impact based on its considerable cumulative contribution to impacts on riparian habitat and other sensitive natural communities.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6.

### Significance of Impact After Mitigation

Significant and unavoidable.

#### 4.4.6.3 Cumulative Threshold 3: State or Federally Protected Wetlands

Cumulative projects within the vicinity of the project area would have the potential to result in a cumulative impact associated with federally or state protected aquatic resources.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program, Sections 401 and 404 of the CWA, and the Porter-Cologne Act.

Existing regulations would ensure that a significant cumulative impact associated with federally or state protected aquatic resources would not occur. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts as required to meet the regulatory agency's no-net-loss standard. As discussed in Section 4.4.5.3, the project would avoid impacts on jurisdictional aquatic resources to the greatest extent feasible, providing compensatory mitigation at an approved ratio for unavoidable impacts (MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12), and would not contribute to cumulative impacts on jurisdictional aquatic resources as a result. As with the project, other project in UMC and surrounding cities are required to comply with existing regulatory requirements and obtain applicable permits from the USACE, RWQCB, and CDFW. Therefore, the project's contribution would not be cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.4.6.4 Cumulative Threshold 4: Wildlife Corridors or Wildlife Nursery Sites

Cumulative projects located in the vicinity of the project area would have the potential to result in a cumulative impact associated with wildlife movement corridors and habitat linkages.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California NCCP Act, which supports the continued provision of wildlife movement corridors. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 4.4.5.4, development of the project would have the potential to impact wildlife corridors or habitat linkages. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 to mitigate the project's impacts on wildlife corridors or habitat linkages to the extent feasible. However, the project would nevertheless result in a significant and unavoidable cumulative impact.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Significant and unavoidable.

#### 4.4.6.5 Cumulative Threshold 5: Local Policies or Ordinances Protecting Biological Resources

Cumulative projects located in the vicinity of the project area would have the potential to result in a cumulative impact associated with conflicts with local policies or ordinances.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable local policies or ordinances. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 4.4.5.5, because the County must allow a "use by right" without discretionary permits or CEQA, the project may not comply with local policies and ordinances protecting biological resources in the 2010 General Plan Land Use Element and Conservation and Open Space Element, Area Plans, Master Plans, Community Plans, the Monterey County Local Coastal Program LUP, and the County Code. A significant cumulative impact associated with a conflict with a local policy or ordinance would occur. Therefore, the project, in combination with other cumulative projects, would result in a significant cumulative impact. The project's contribution would be cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Significant and unavoidable.

#### 4.4.6.6 Cumulative Threshold 6: Habitat Conservation Plans and Natural Community Conservation Plans

As discussed in Section 4.4.5.6, the project area is not in an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, the project, in combination with other cumulative projects, would not result in a significant cumulative impact from conflicts with regional conservation plans. The project's contribution would not be cumulatively considerable.

### Significance of Impact

No impact.

### Mitigation Measures

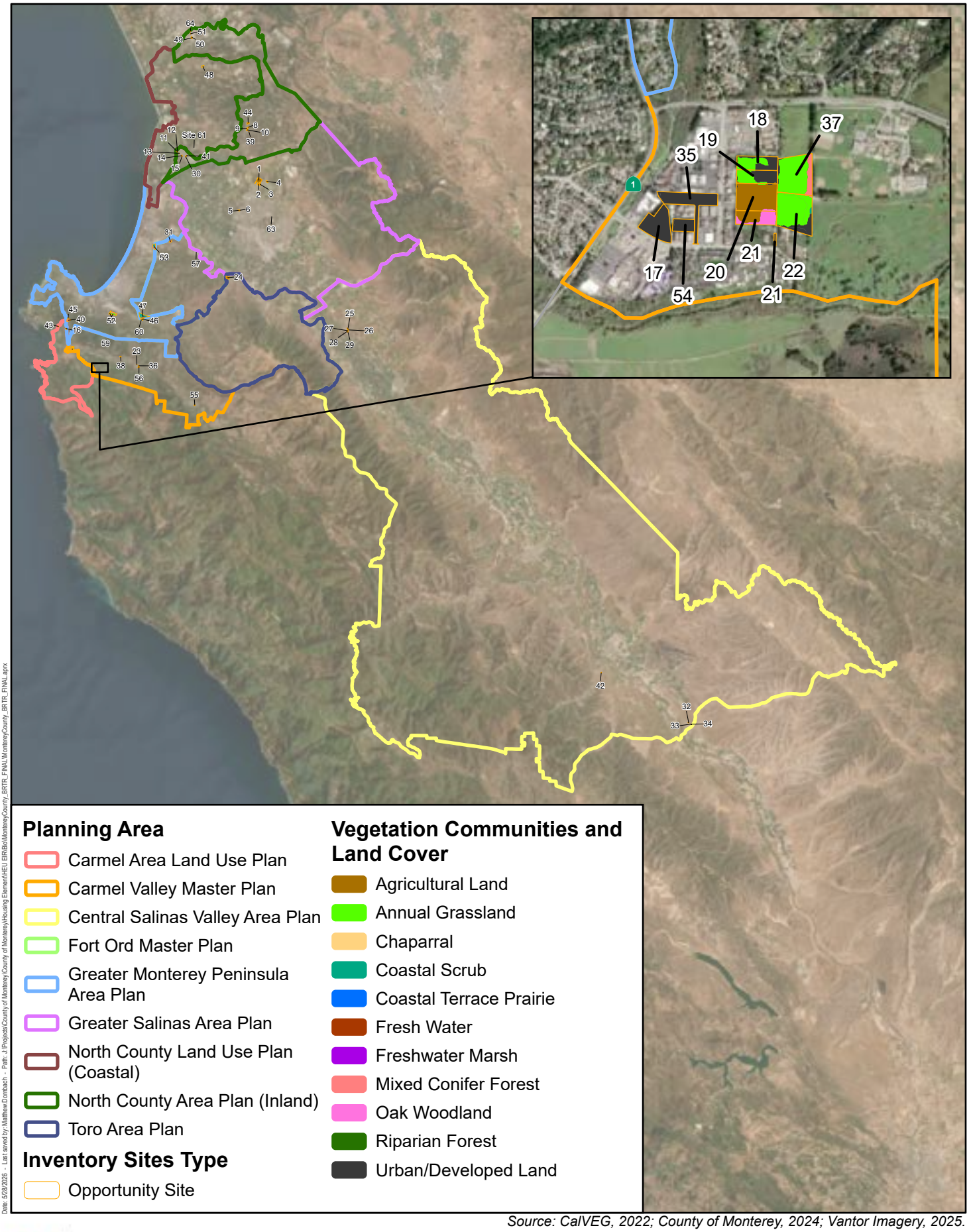
No mitigation measures are required.

### Significance of Impact After Mitigation

No impact.

## 4.4.7 Conclusion

Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would mitigate all direct and indirect permanent and temporary impacts on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, wildlife corridors and habitat linkages, and compliance with local policies or ordinances to the extent feasible. However, because the County must process certain uses by right, impacts on biological resources would be significant and unavoidable for Thresholds 1, 2, 4, and 5. When considered in combination with cumulative projects, impacts on biological resources would be cumulatively considerable for Cumulative Thresholds 1, 2, 4, and 5.




*Source: CalVEG, 2022; County of Monterey, 2024; Vantor Imagery, 2025.*

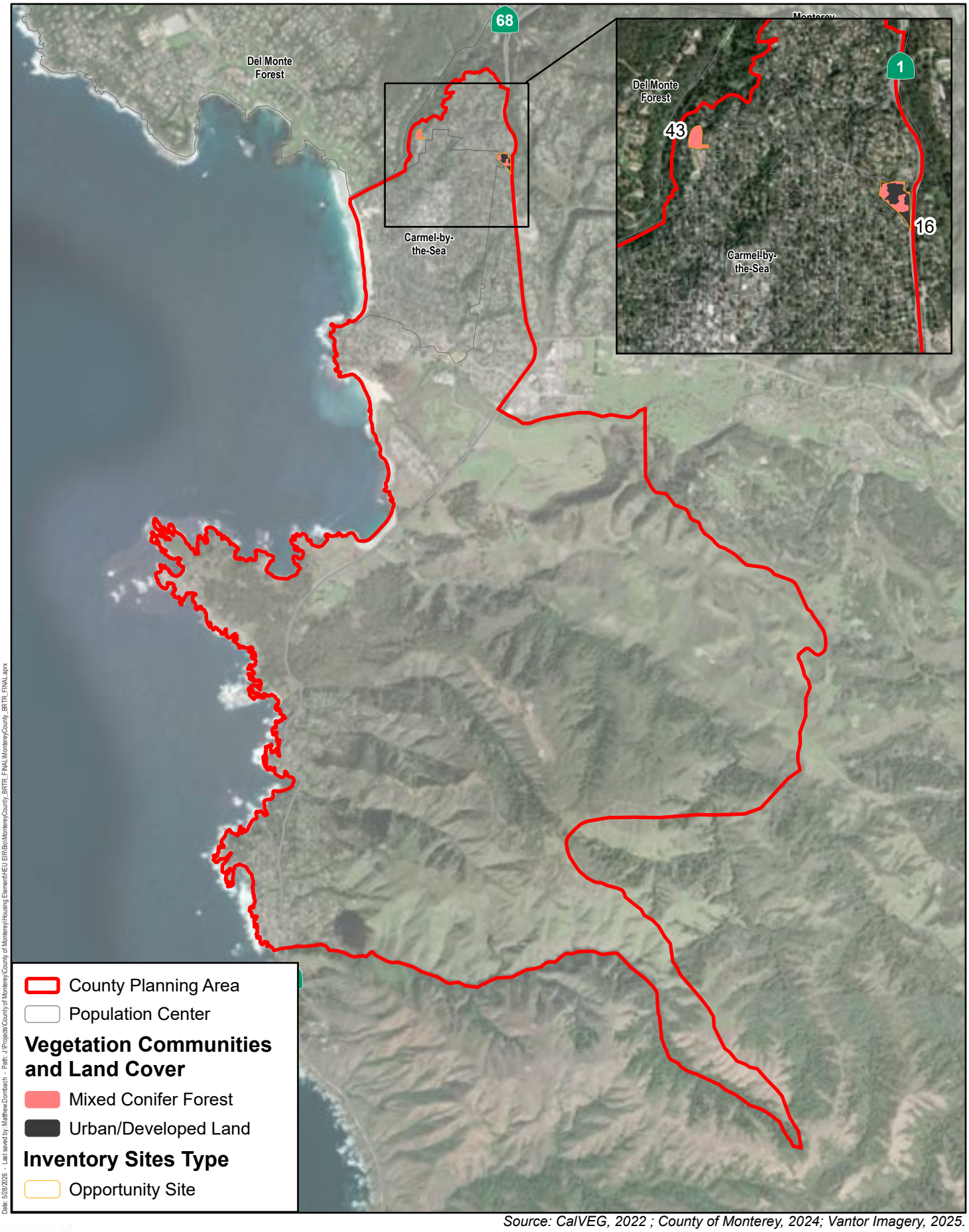
Harris & Associates

**Figure 4.4-1**

Vegetation and Land Cover - Index

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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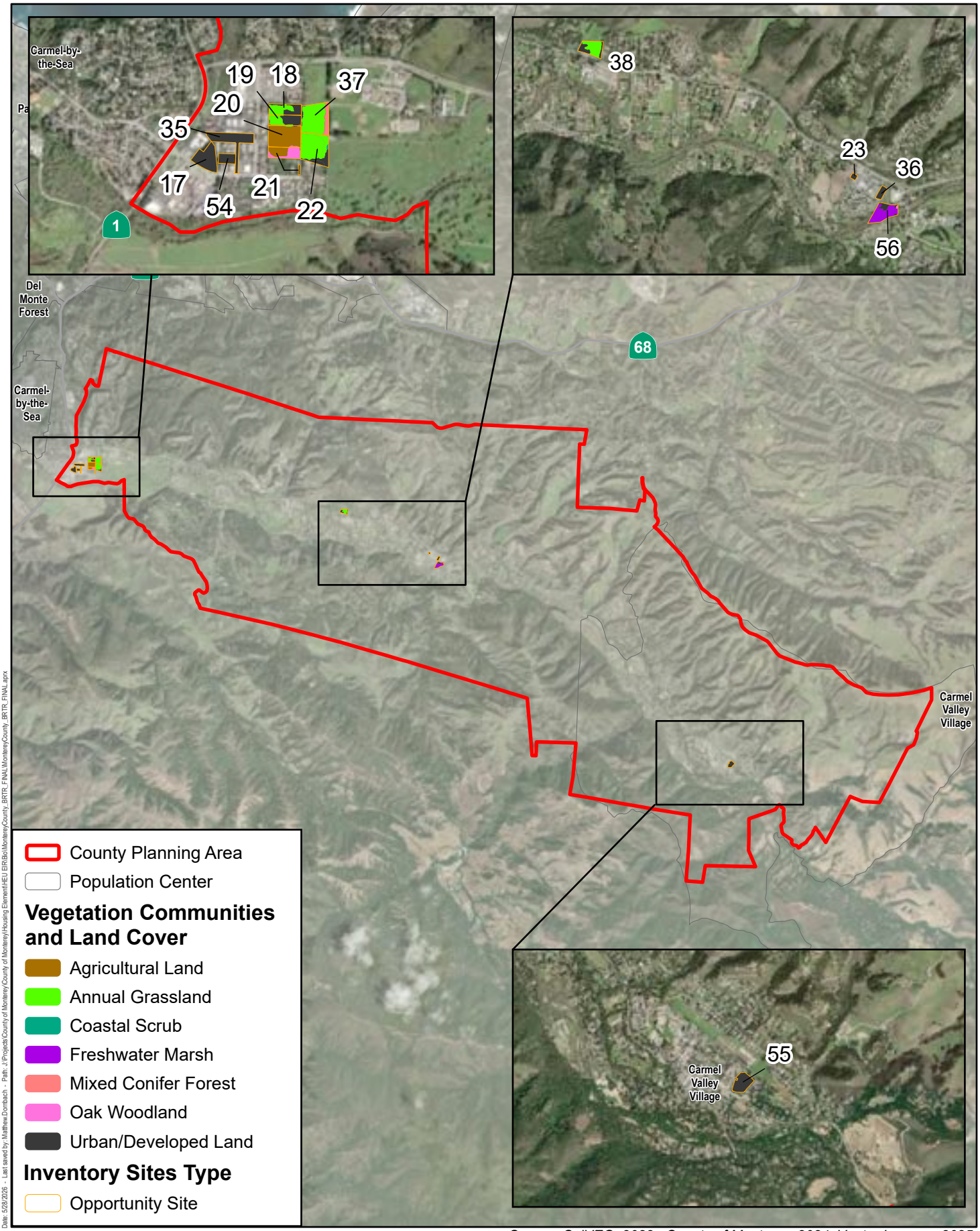
**Figure 4.4-1a**

Vegetation Communities and Land Cover in Carmel Area Land Use Plan



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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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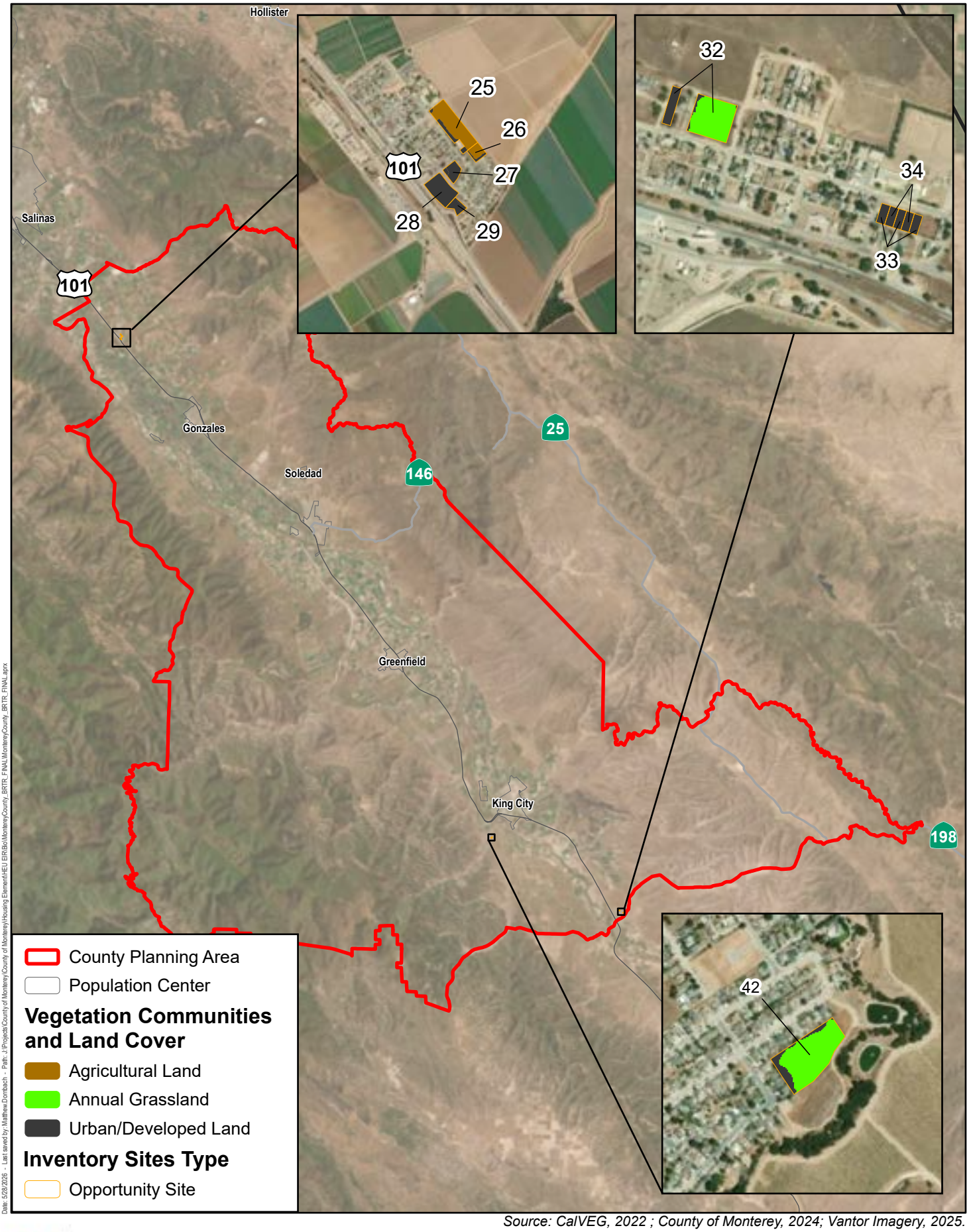
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**Figure 4.4-1b**

Vegetation Communities and Land Cover in Carmel Valley Master Plan

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Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

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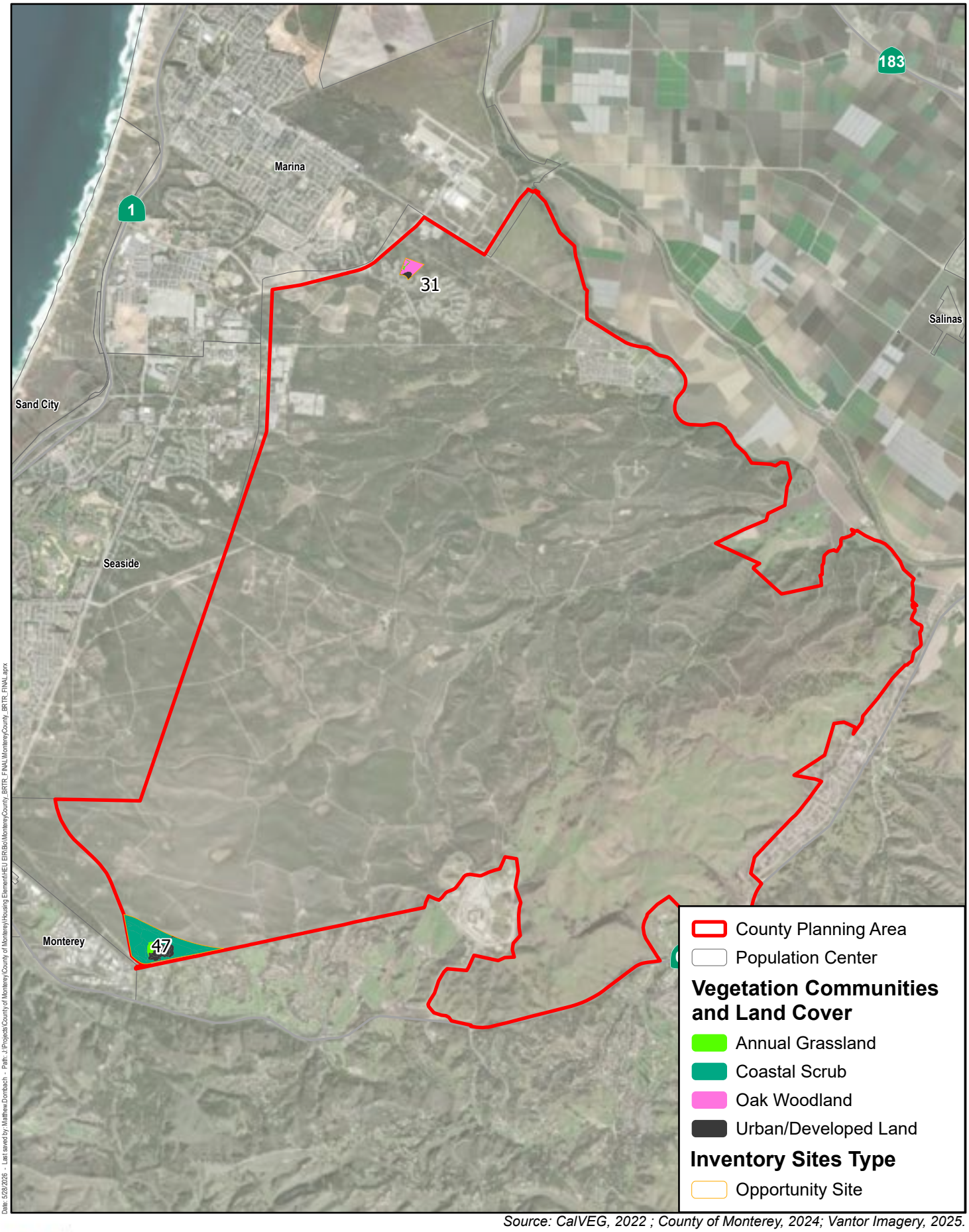
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**Figure 4.4-1c**

Vegetation Communities and Land Cover in Central Salinas Valley Area Plan

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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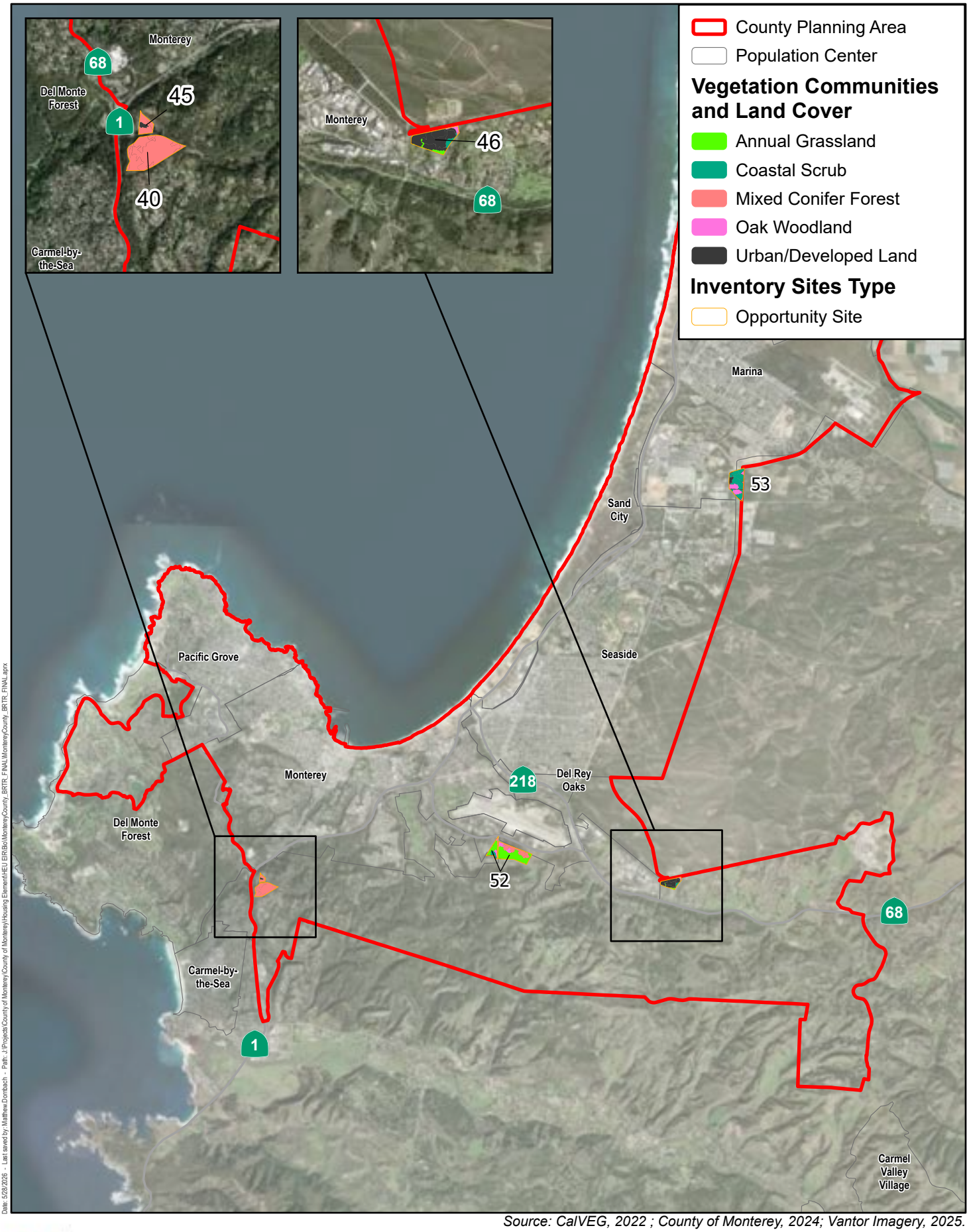
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**Figure 4.4-1d**

Vegetation Communities and Land Cover in Fort Ord Master Plan

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Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

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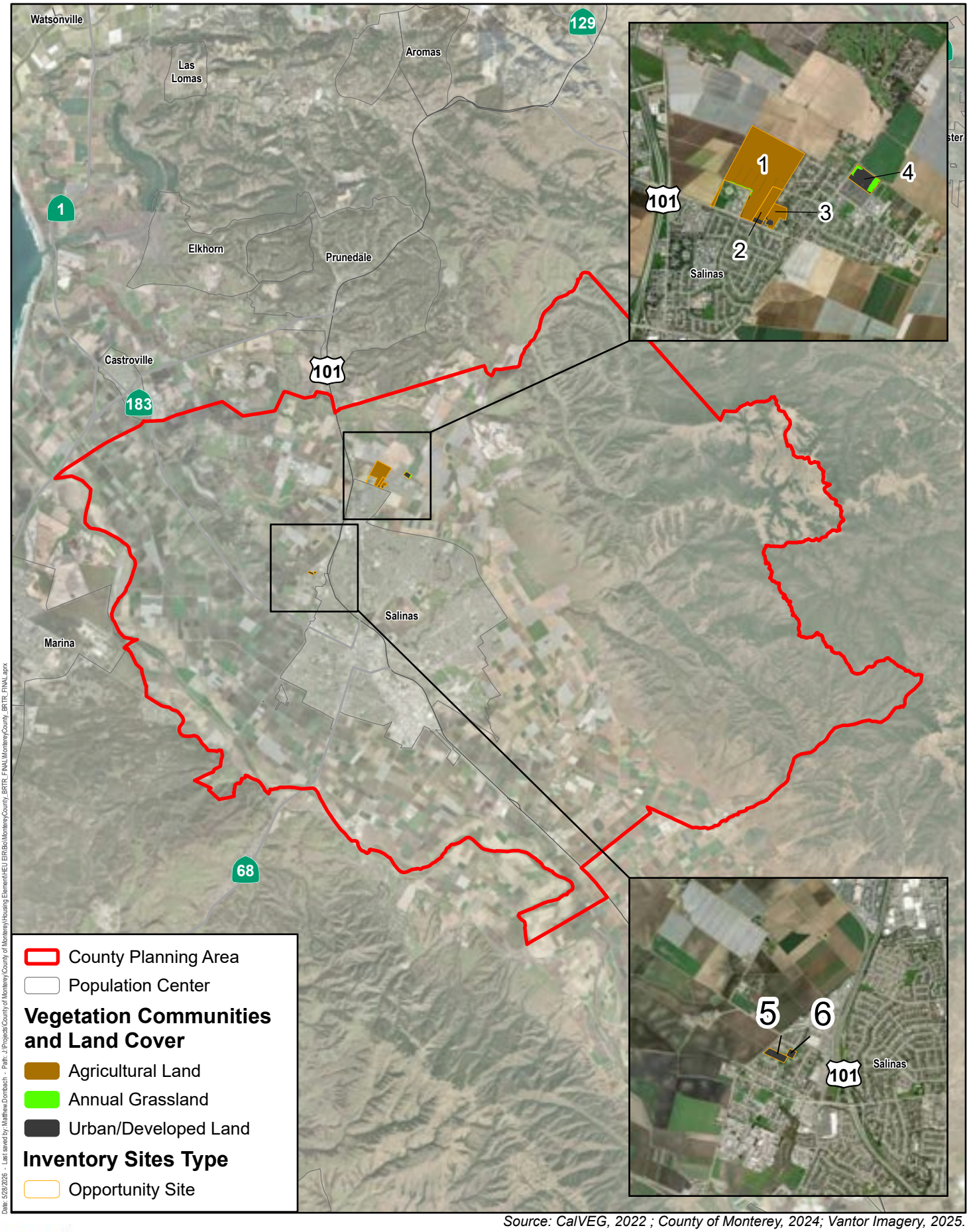
**Figure 4.4-1e**

Vegetation Communities and Land Cover in Greater Monterey Peninsula Area Plan



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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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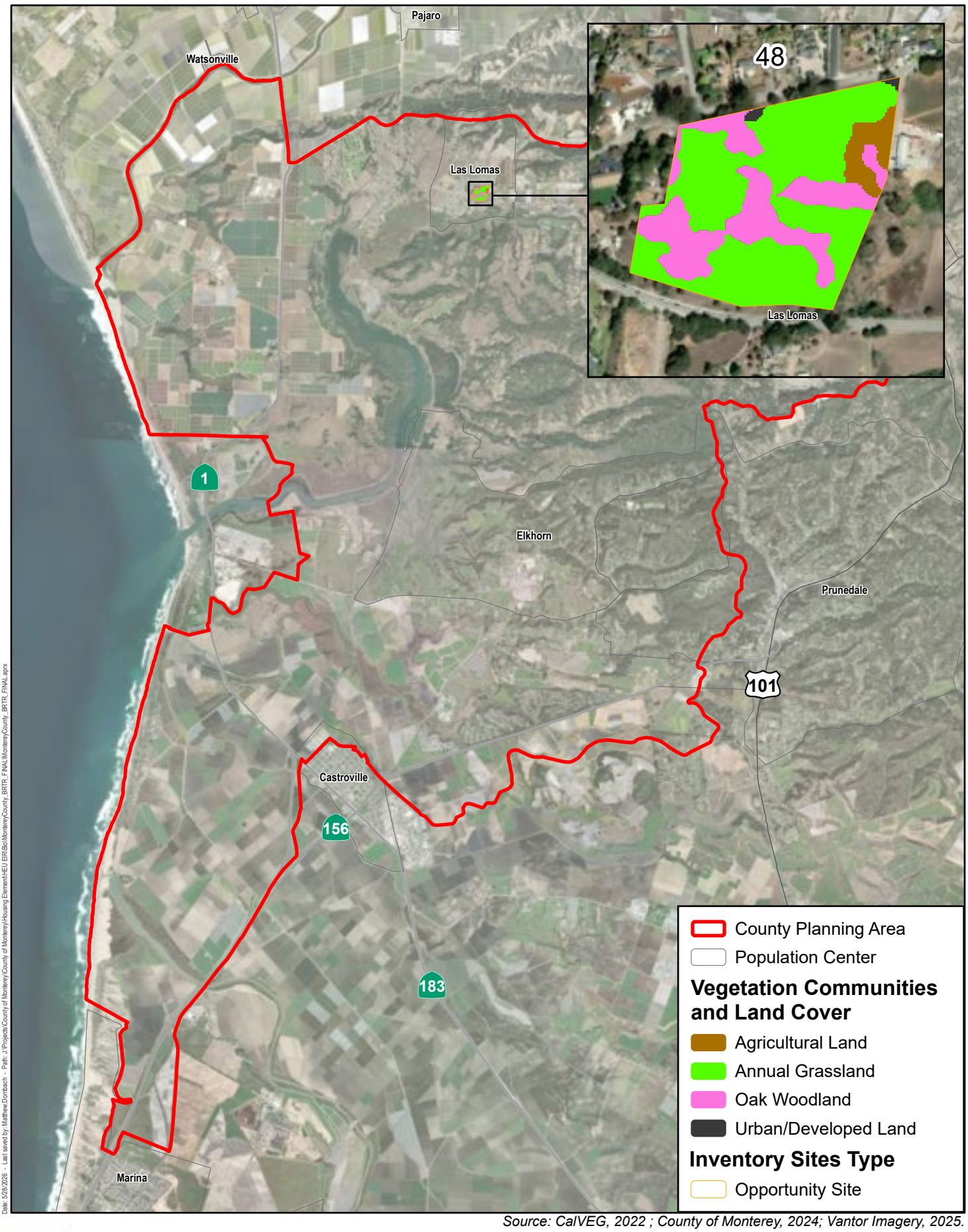
**Figure 4.4-1f**

Vegetation Communities and Land Cover in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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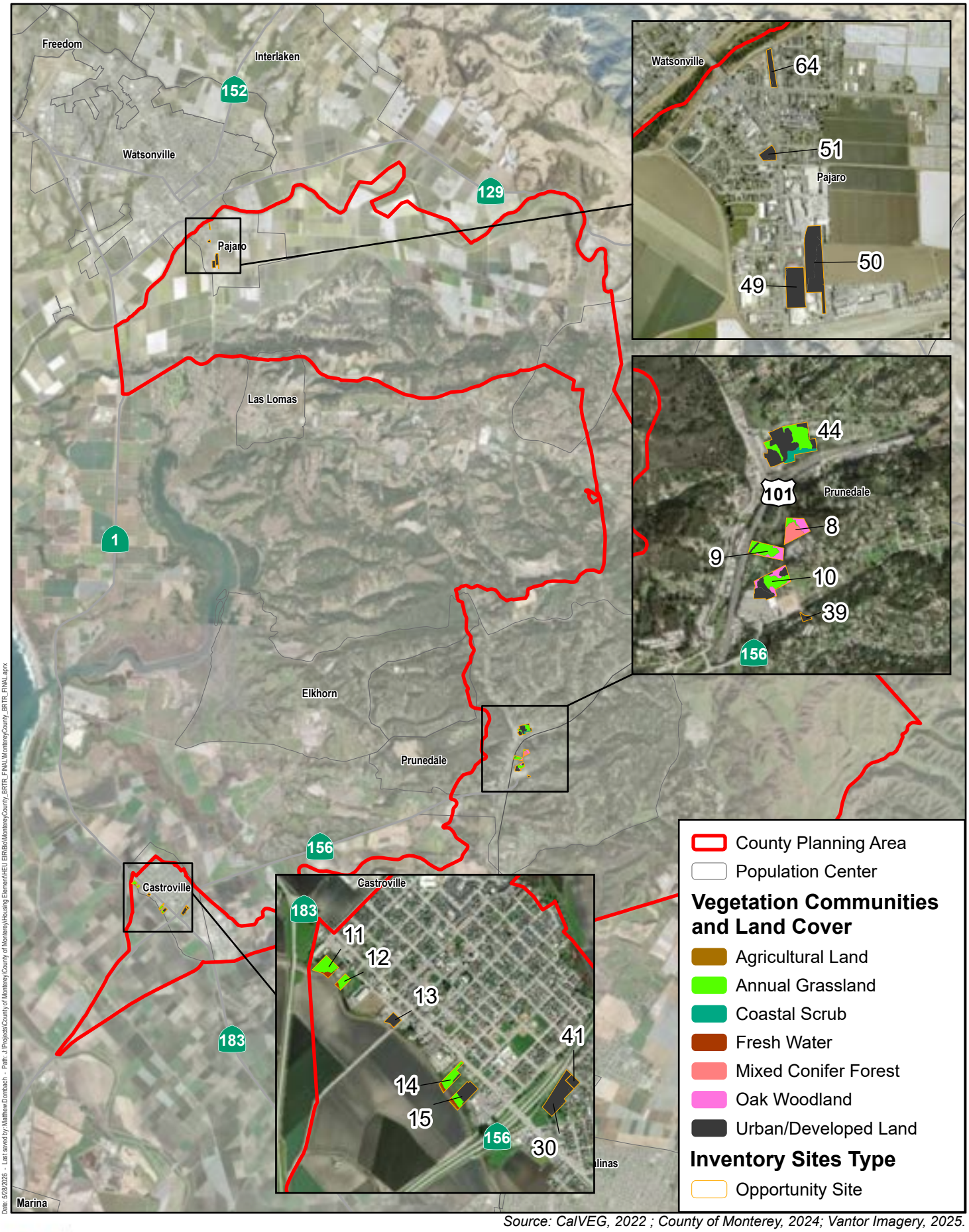
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**Figure 4.4-1g**

Vegetation Communities and Land Cover in North County Land Use Plan (Coastal)

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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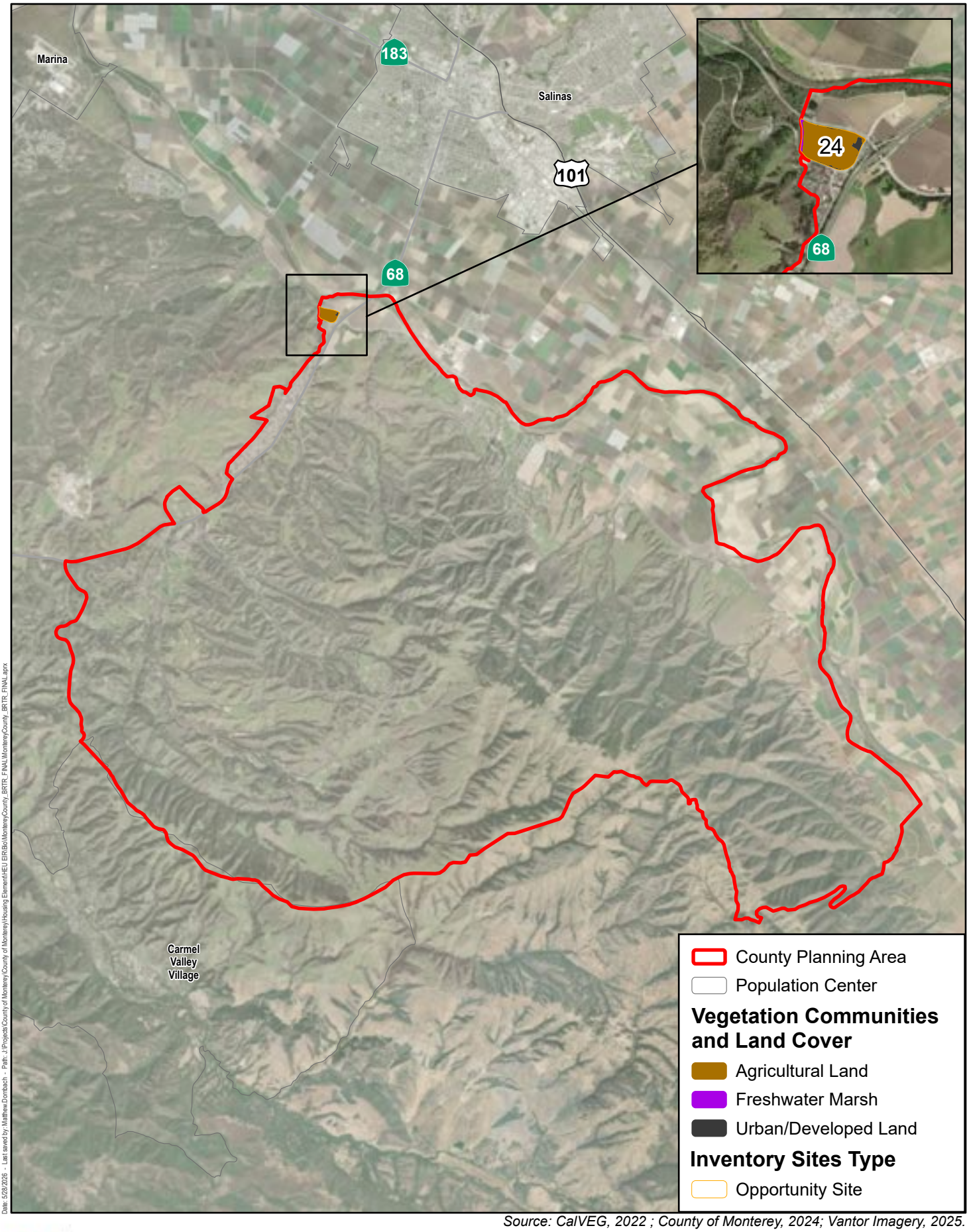
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**Figure 4.4-1h**

Vegetation Communities and Land Cover in North County Area Plan (Inland)

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*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

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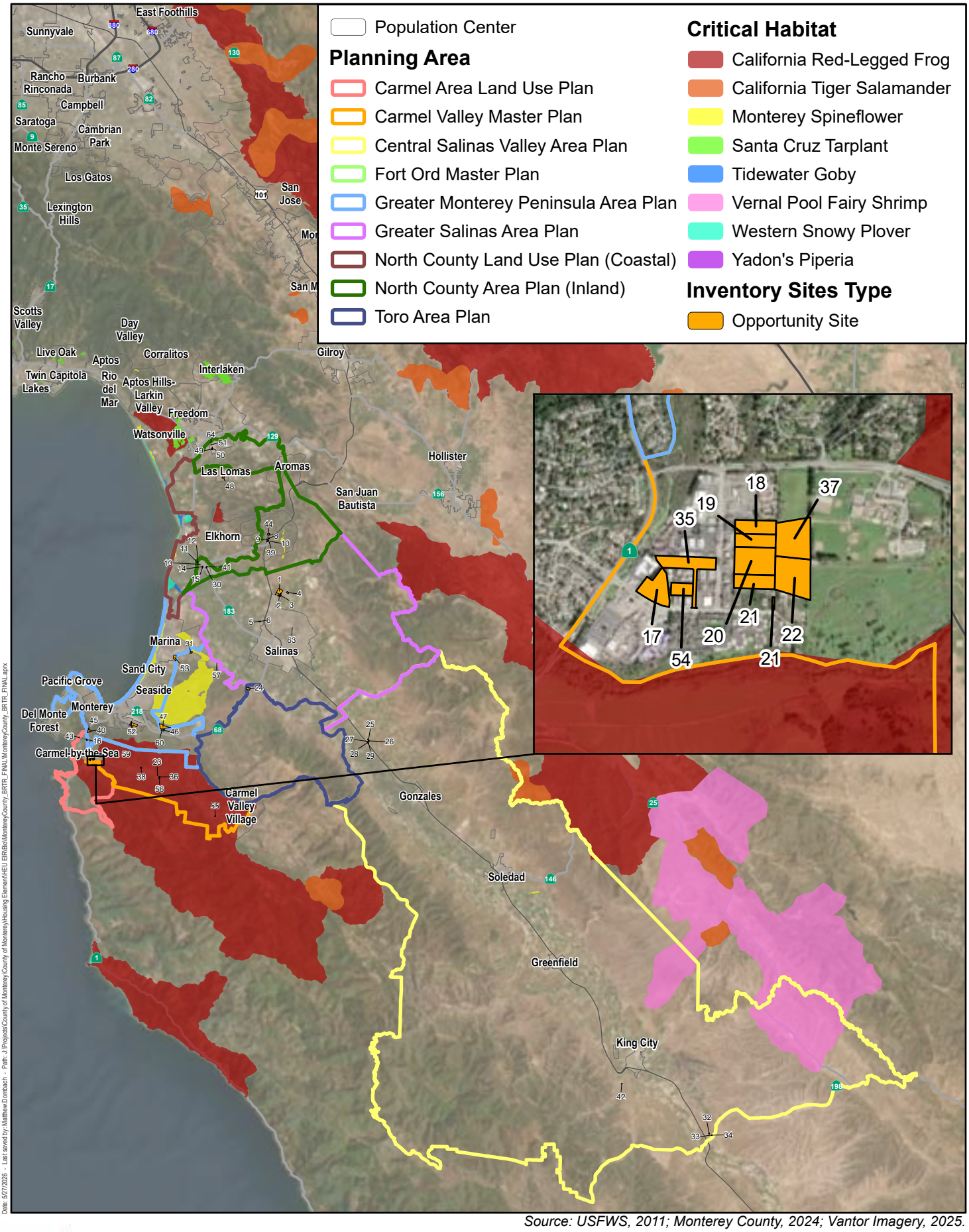
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**Figure 4.4-1i**

Vegetation Communities and Land Cover in Toro Area Plan

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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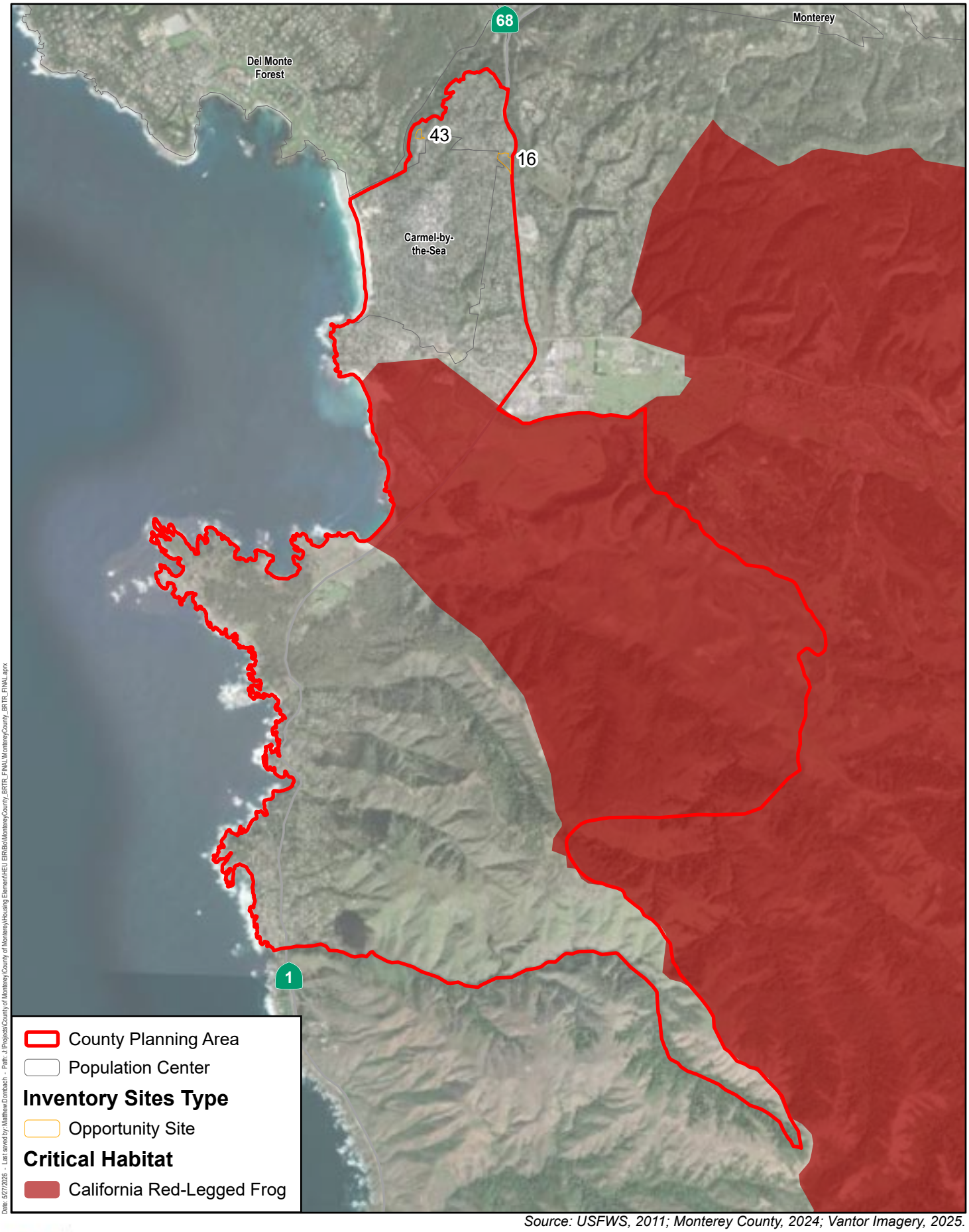
**Figure 4.4-2**

Critical Habitat - Index



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Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.

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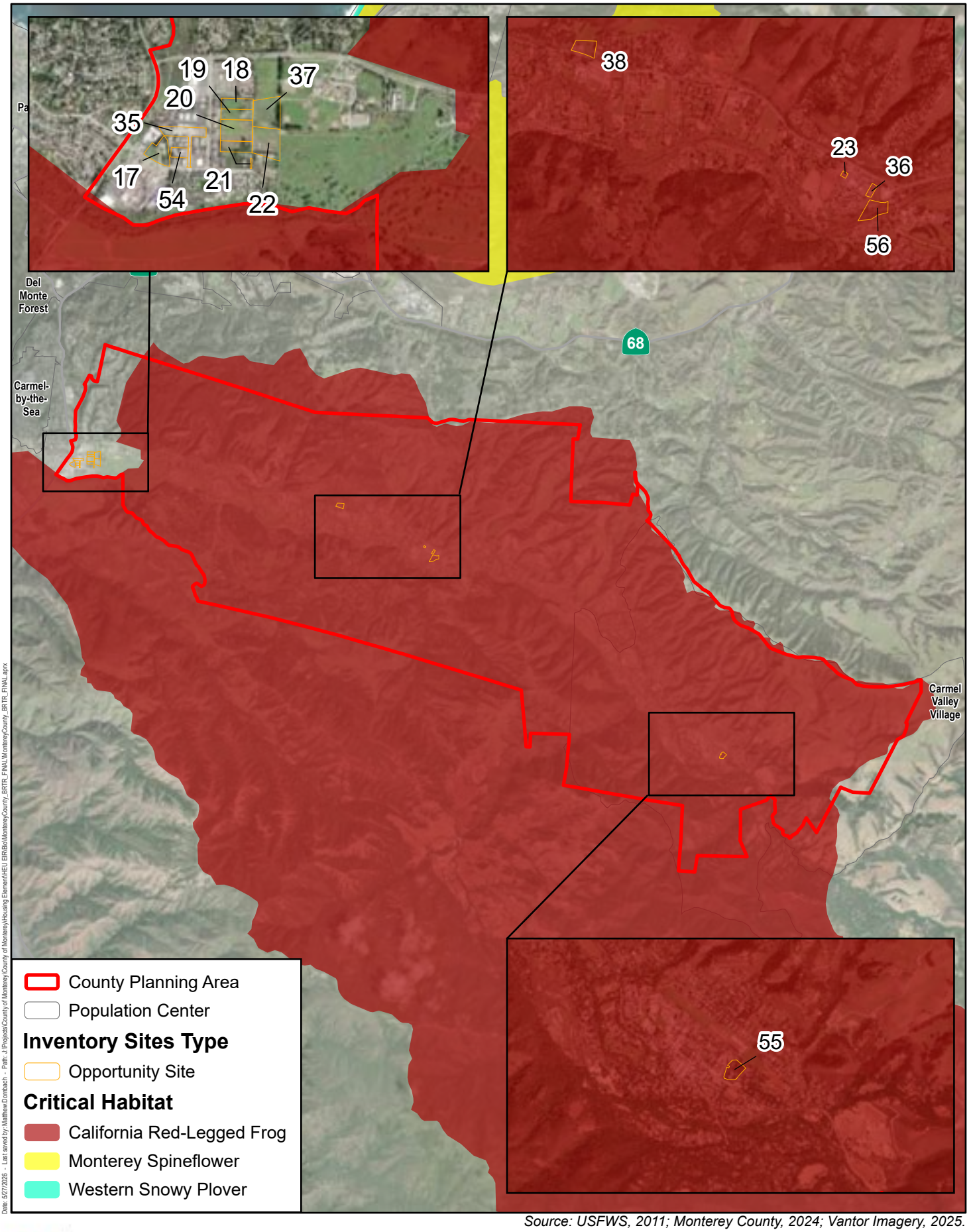
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**Figure 4.4-2a**

Critical Habitat in Carmel Area Land Use Plan

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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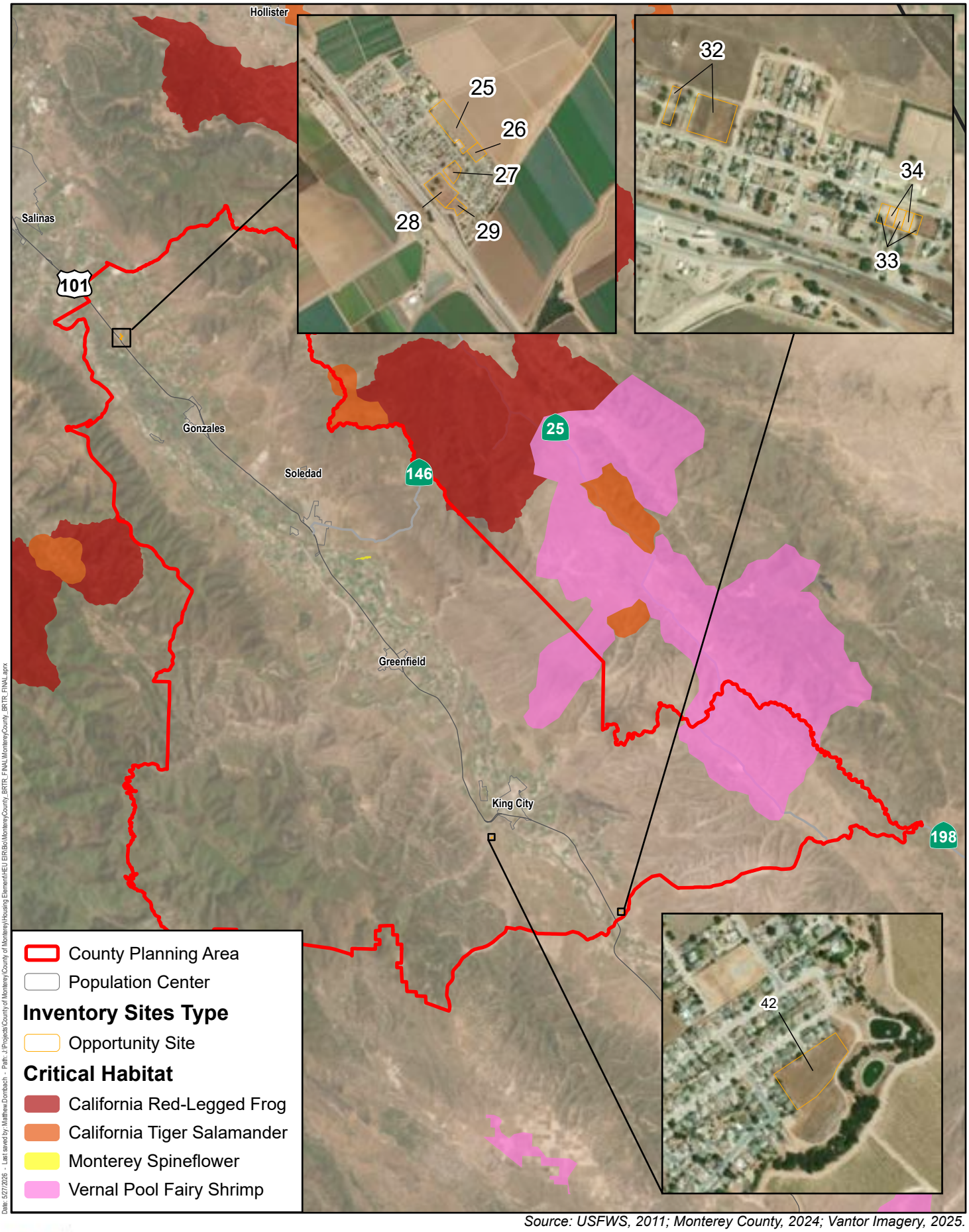
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**Figure 4.4-2b**

Critical Habitat in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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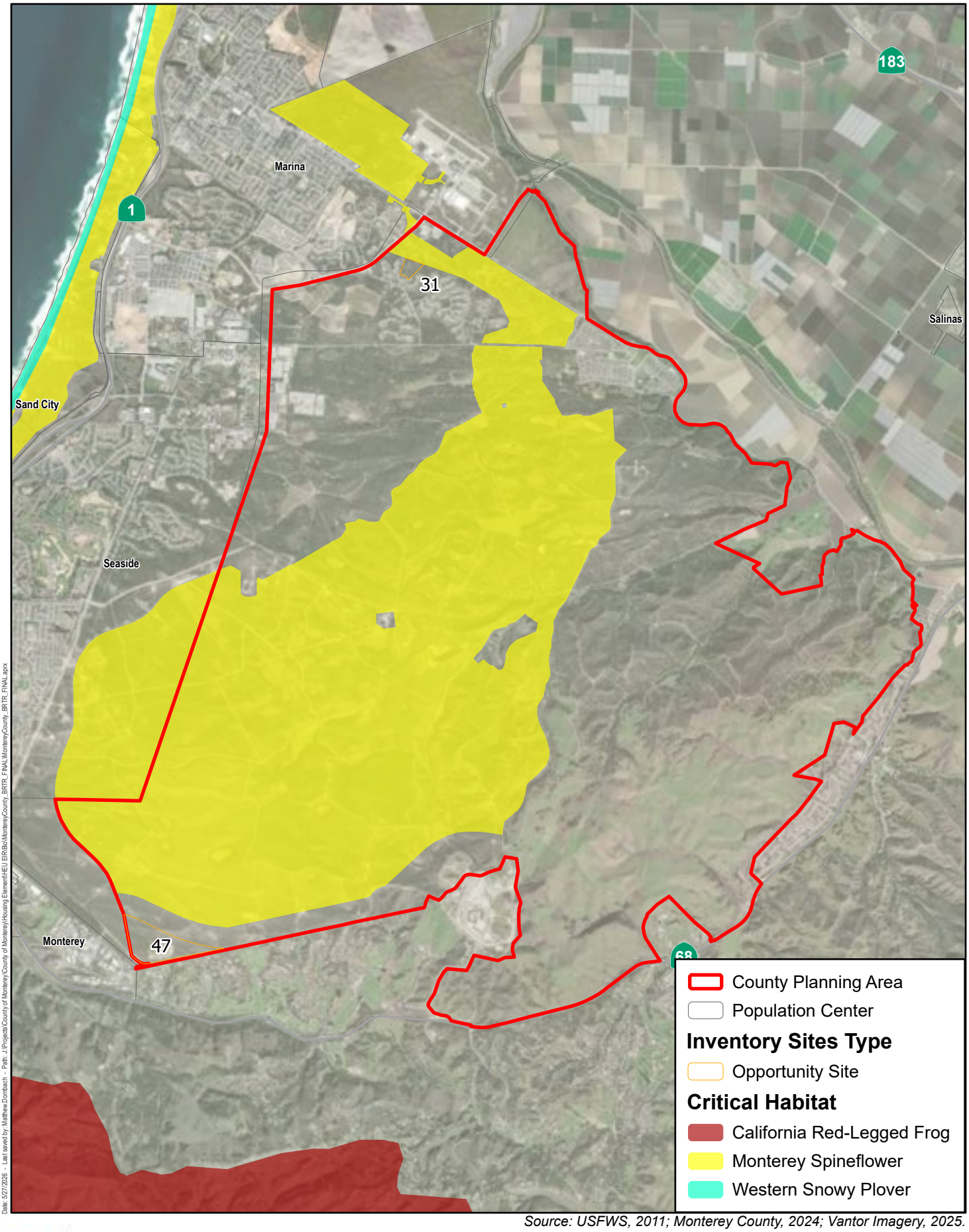
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**Figure 4.4-2c**

Critical Habitat in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.

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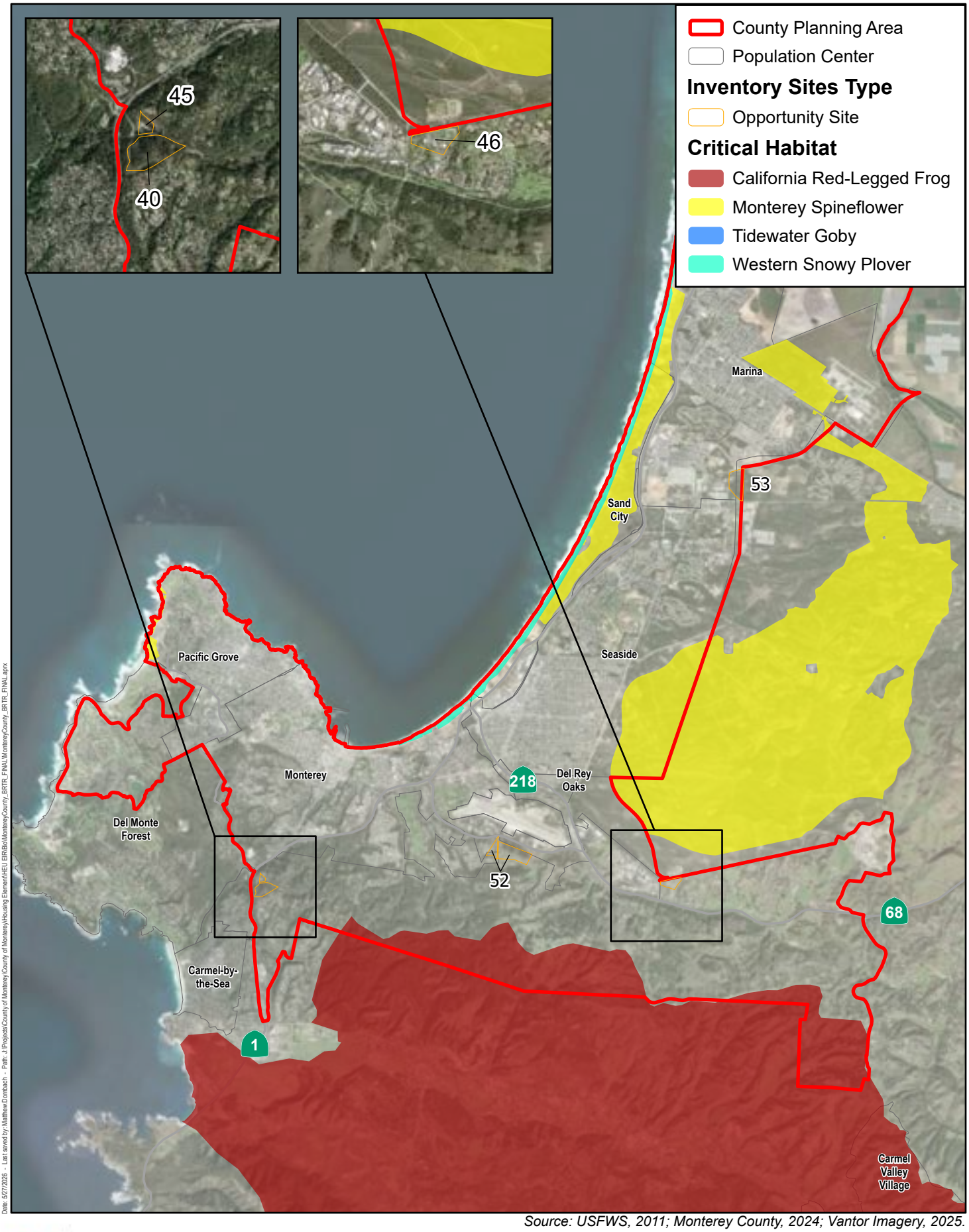
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**Figure 4.4-2d**

Critical Habitat in Fort Ord Master Plan

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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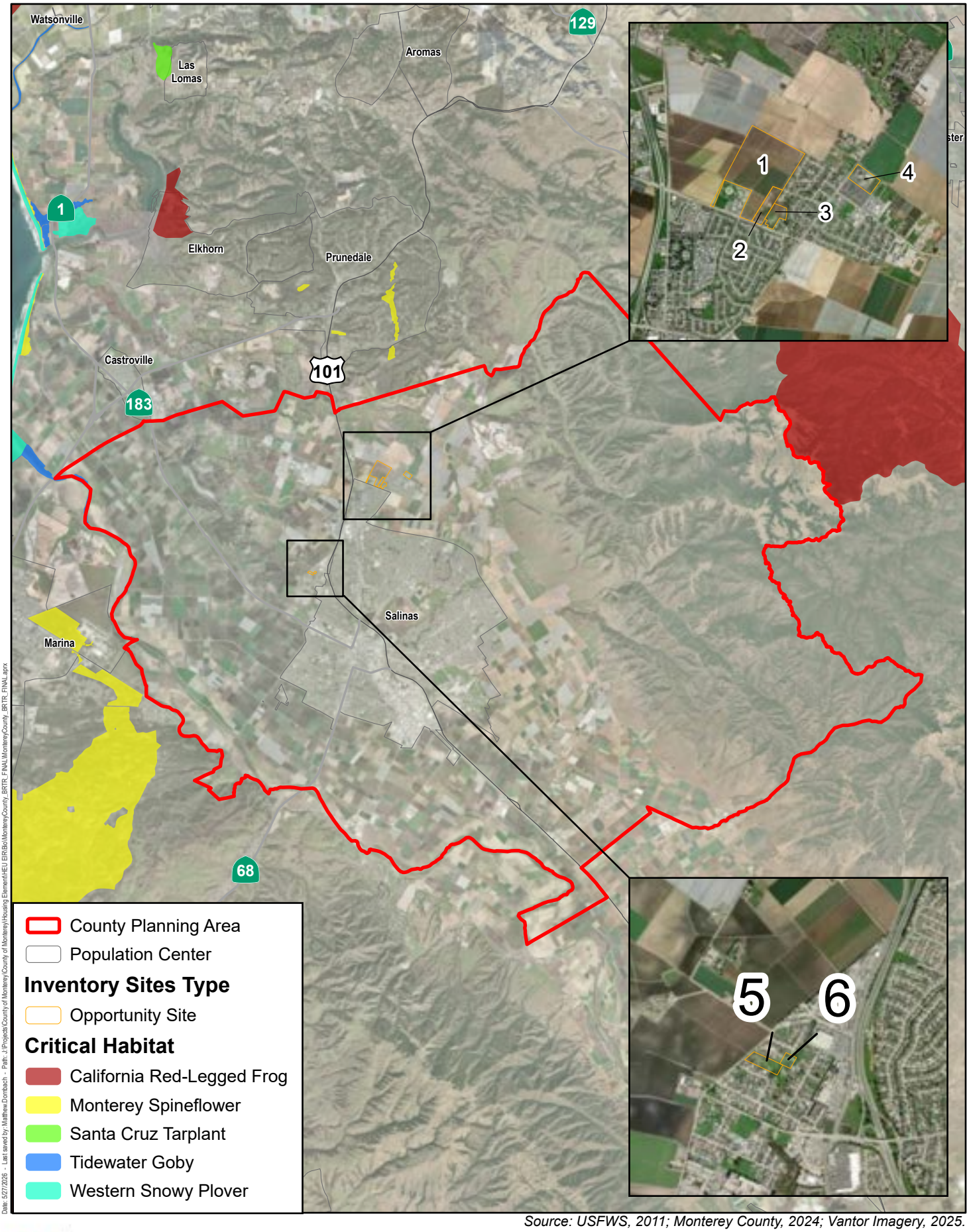
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**Figure 4.4-2e**

Critical Habitat in Greater Monterey Peninsula Area Plan

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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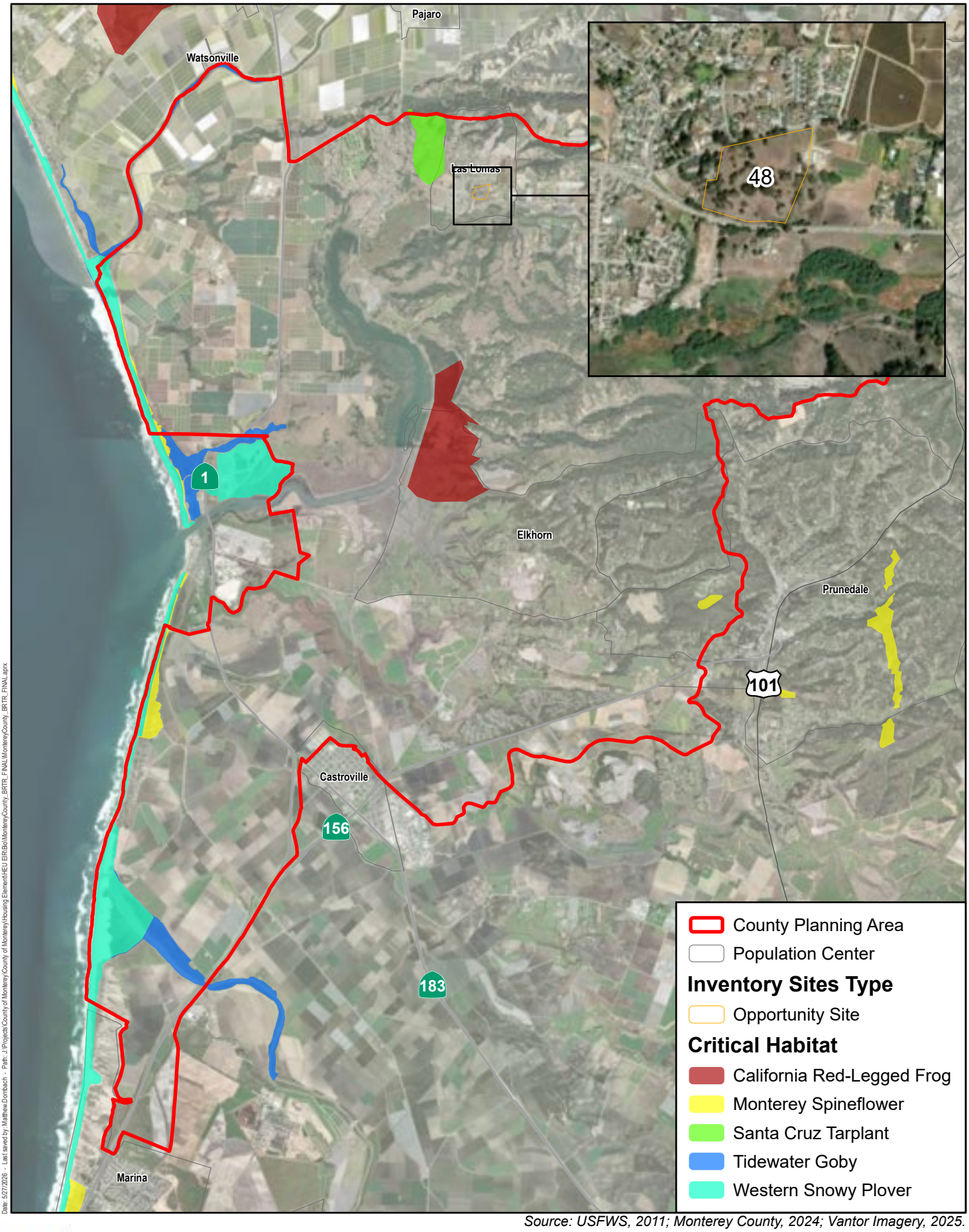
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**Figure 4.4-2f**

Critical Habitat in Greater Salinas Area Plan

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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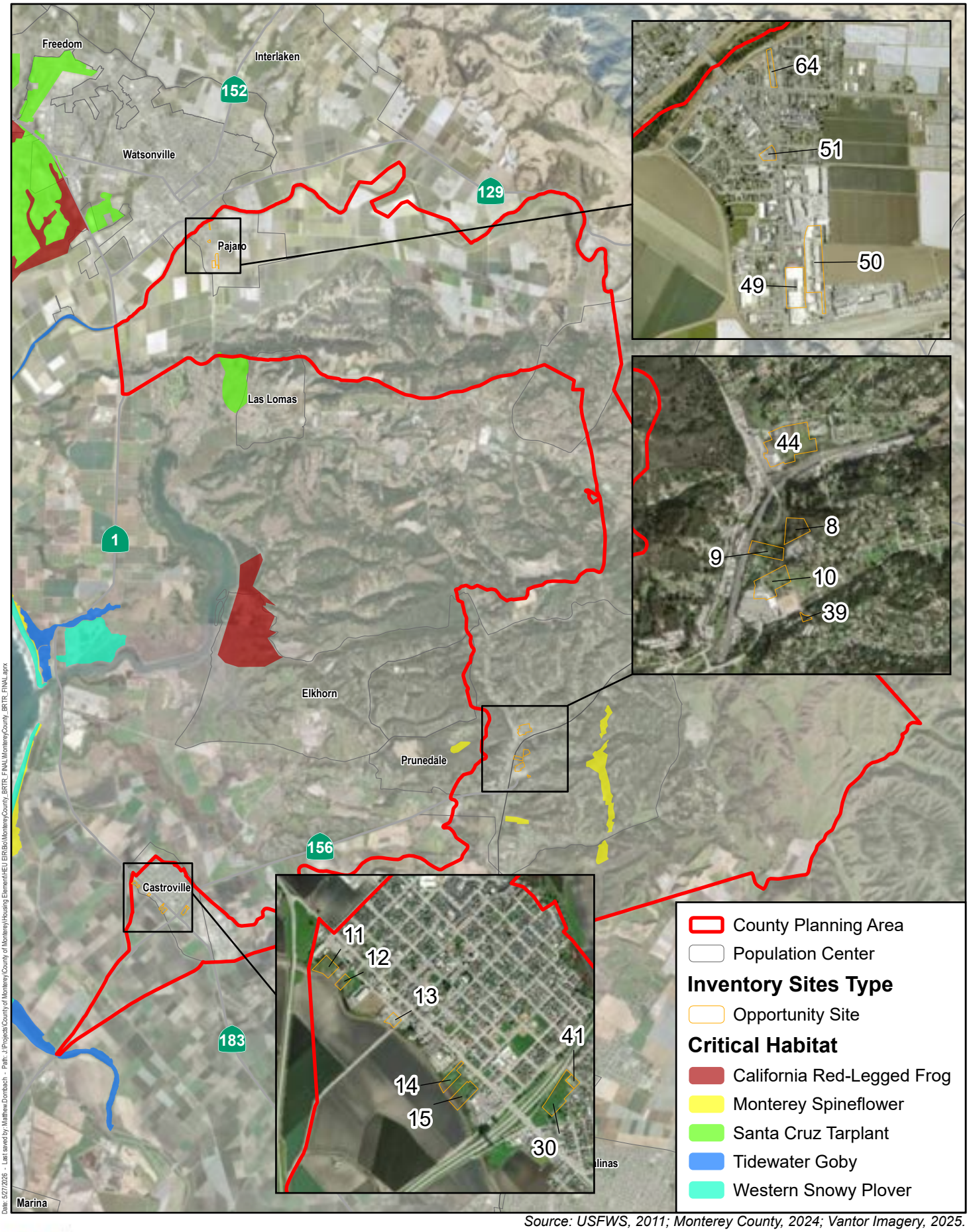
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**Figure 4.4-2g**

Critical Habitat in North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

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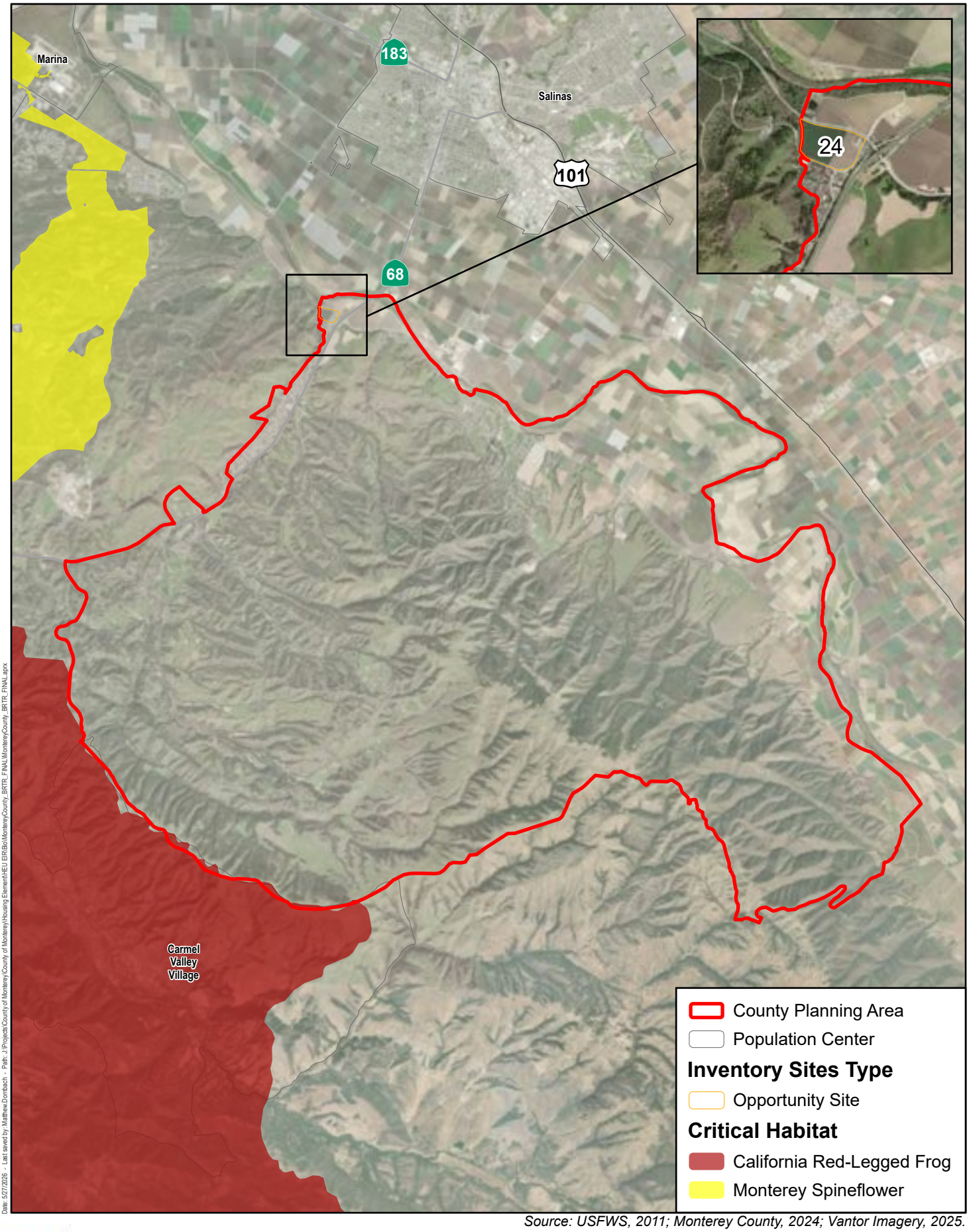
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**Figure 4.4-2h**

Critical Habitat in North County Area Plan (Inland)

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Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.

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**Figure 4.4-2i**

Critical Habitat in Toro Area Plan



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# 4.5 Cultural Resources

This section evaluates the potential for impacts related to cultural resources resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts to cultural resources, particularly from conversion to residential uses due to implementation of HEU6.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

This section is based on the Cultural Resources Technical Report (CRTR) prepared for the project by Harris & Associates. The CRTR is included as Appendix H to this PEIR.

## 4.5.1 Regulatory Setting

The treatment of cultural resources is governed by federal and state laws and guidelines. Specific criteria exist to determine if prehistoric and historic sites or objects are significant or protected by law. Federal and state significance criteria generally focus on the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research. Some resources that do not meet federal significance criteria may be considered significant under state criteria. The laws and regulations seek to mitigate impacts to significant prehistoric or historical resources. The federal and state laws and guidelines for protecting historical resources are summarized below, followed by local regulations.

#### 4.5.1.1 Federal

### National Historic Preservation Act (U.S. Code, Title 54, Section 300101 et seq.)

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. Listing in the NRHP provides recognition that a property is significant to the nation, the state, or the community and assumes that federal agencies consider historical value in the planning for federal and federally assisted projects. Properties listed in the NRHP or determined eligible for listing must meet certain criteria for historical significance and possess integrity of form, location, and setting. Criteria for listing in the NRHP, which are set forth in the Code of Federal Regulations, Title 36, Part 60.4, are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP).
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations.
3. It possesses at least one of the following characteristics:

| | |
|---|---|
| Criterion A | Is associated with events that have made a significant contribution to the broad patterns of our history; or |
| Criterion B | Is associated with the lives of persons significant in our past; or |
| Criterion C | Embodies the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction; or |
| Criterion D | Has yielded, or may be likely to yield, information important in prehistory or history. |

Eligible properties must meet at least one of the criteria and exhibit most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

1. **Location** is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since its construction.
2. **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.
3. **Setting** is the physical environment of a historic property that illustrates the character of the place.
4. **Materials** are the physical elements that were combined or deposited during a particular period and in a particular pattern or configuration to form a historic property.

5. **Workmanship** is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6. **Feeling** is a property's expression of the aesthetic or historic sense of a particular period. This intangible quality is evoked by physical features that reflect a sense of a past time and place.
7. **Association** is the direct link between the important historic event or person and a historic property. Continuation of historical use and occupation help maintain integrity of association.

These criteria have largely been incorporated into the California Environmental Quality Act (CEQA) Guidelines.

### Native American Graves Protection and Repatriation Act (U.S. Code, Title 25, Section 3001 et seq.)

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 provides a process for museums and federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants and culturally affiliated Native American Tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and Tribal lands, and penalties for noncompliance and illegal trafficking. Implementation of the project would be conducted in compliance with NAGPRA.

Federal curation regulations are also provided in the Code of Federal Regulations, Title 36, Part 79, and apply to collections that are excavated or removed under the authority of the Antiquities Act (16 USC 431–433), the Reservoir Salvage Act (16 USC 469–469c), Section 110 of the National Historic Preservation Act (16 USC 470h-2), or the Archaeological Resources Protection Act (16 USC 470aa–mm). Such collections generally include those that are the result of a prehistoric or historical resources survey, excavation, or other study conducted in connection with a federal action, assistance, license, or permit.

#### 4.5.1.2 State

### California Register of Historical Resources

The California Register of Historical Resources (CRHR) is a state government program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archaeological resources and encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical

resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

The term "historical resource" includes but is not limited to any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (California Public Resources Code [PRC], Section 5020.1[j]). Historical resources may be designated as such through three different processes:

- Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k])
- A local survey conducted pursuant to PRC Section 5024.1(g)
- Listing in or eligibility for listing in the NRHP (PRC Section 5024.1[d][1])

To be eligible for listing in the CRHR, a historical resource must satisfy at least one of the following four criteria:

- **Criterion 1.** It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- **Criterion 2.** It is associated with the lives of persons important to local, California, or national history.
- **Criterion 3.** It embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values.
- **Criterion 4.** It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

### California Historic Building Code

The California Historic Building Code—California Code of Regulations, Title 24, Part 8—provides regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historic Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide access for people with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

### Mills Act

The Mills Act, enacted in 1972, is a California economic incentive program that promotes the preservation of residential neighborhoods and the revitalization of downtown commercial districts. The program is administered by local governments and supports the restoration and preservation

of qualified historical buildings by private property owners. It authorizes participating cities and counties to enter into contracts with owners of qualified historical properties, who agree to actively restore and maintain their properties in exchange for property tax relief. Relevant state codes include California Government Code (CGC), Article 12 (Sections 50280–50290), and California Revenue and Taxation Code, Article 1.9 (Sections 439–439.4).

### Senate Bill 18: Traditional Tribal Cultural Places

As of March 1, 2005, Senate Bill (SB) 18 (CGC Sections 65352.3 and 65352.4) requires that, before the adoption or amendment of a General Plan proposed on or after March 1, 2005, a city or county must consult with Native American Tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects in that jurisdiction. The consultation intends to establish a meaningful dialogue regarding potential means to preserve Native American places of importance. It allows for Tribes to hold conservation easements and for Tribal Cultural Places to be included in open space planning.

### California Native American Graves Protection and Repatriation Act

The California NAGPRA, enacted in 2001 under AB 978, required the state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined therein, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. California NAGPRA also provides a process for the identification and repatriation of these items to the appropriate Tribes. The bill also created a Repatriation Oversight Commission with oversight authority. The intent of the legislation was to cover gaps in the federal NAGPRA specific to California.

After the Repatriation Oversight Commission remained unfunded for over a decade, the Native American Heritage Commission was granted oversight authority. In 2018, the State Legislature added additional Native American Heritage Commission responsibilities under AB 2836. On September 25, 2020, Governor Newsom signed AB 275 into law, which amended California NAGPRA to add additional Native American Heritage Commission responsibilities, including maintaining a list of California Indian Tribes and their state Aboriginal territories, adopting mediation procedures, and publishing notices of completion of preliminary inventories and summaries on the Commission website.

### California Government Code, Sections 6254(r) and 6254.10

CGC Sections 6254(r) and 6254.10 were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and

reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

## California Public Resources Code

Historical and archaeological sites are protected under a wide variety of state policies and regulations in the PRC. In addition, cultural resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The Commission oversees the administration of the CRHR and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

### *California Public Resources Code, Section 5097 et seq.*

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

### *California Health and Safety Code, Section 7050.5, and California Public Resources Code, Section 5097.9*

California Health and Safety Code, Section 7050.5, addresses the protection of human remains discovered in any location other than a dedicated cemetery and makes it a misdemeanor for any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in PRC Section 5097.99. It further states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains will occur until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions concerning investigation of the circumstances, manner, and cause of any death and that the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or

to their authorized representative, in the manner provided in PRC Section 5097.98. If the county coroner determines that the remains are not subject to their authority and if the county coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, they shall contact, by telephone and within 24 hours, the NAHC. Whenever the NAHC receives notification of a discovery of Native American human remains from the county coroner, the agency shall immediately notify the most likely descendant if it believes them to be the most likely descendant of the deceased Native American. The most likely descendant may inspect the site of the discovery and make recommendations on the removal or reburial of the remains.

#### 4.5.1.3 Local

### 2010 General Plan

#### *Conservation and Open Space Element*

The Conservation and Open Space Element of the Monterey County General Plan (2010 General Plan) (County of Monterey 2010) includes goals and policies to support conservation and identification of archaeological resources, and Native Californian cultural sites, sacred places, and burial sites. Goal OS-6 and Policies OS-6.1 through OS-6.6 encourage the conservation and identification of Monterey County's archaeological resources consistent with State Office of Historic Preservation guidelines and definitions. In particular, Policies OS-6.1 and OS-6.2 require compilation of information on the location and significance of Monterey County's archaeological resources using Phase I, II, and III studies and records of Native California consultation to use in the environmental and development review process and filed with appropriate state and Tribal government agencies. New development in moderate or high-sensitivity zones, within 150 feet of a known recorded archaeological and/or cultural site, or where there is specific additional information that suggests the presence of archaeological resources must complete a Phase I survey (Policies OS-6.3 and OS-6.4). Policy OS-6.5 encourages avoidance of impacts to sensitive archaeological sites by designing or clustering development to avoid these areas or requiring dedication of permanent conservation easements. Policy OS-6.6 requires the County to adopt a uniform set of guidelines to define Phase I, II, and III significance assessment and data recovery programs, as well as guidelines to set standards for consultation requirements with Native Californian descendants with procedures for determining the presence or absence of sacred or traditional sites, including monitoring requirements and participation in cultural resource data recovery programs.

Additionally, Goal OS-8 and Policies OS-8.1 through OS-8.7 encourage the conservation and identification of Monterey County's Native Californian cultural sites, sacred places, and burial sites. Specifically, Policy OS-8.1 requires preservation in place for all Native Californian cemeteries, burials, shrine sites, and sacred place locations to the greatest extent possible and

Tribal consultation in cases where such sites and locations cannot be retained in place without modification. Policies OS-8.3 and OS-8.4 encourage minimization and avoidance of impacts to burial sites by prohibiting disturbance to such locations until all steps in compliance with applicable state and local regulations and any completed memorandum of understanding with a local Tribe have been completed as well as designing or clustering development to avoid these areas or requiring dedication of permanent conservation easements.

#### *Public Services Element*

Goal PS-12 and Policies PS-12.1 through PS-12.17 encourage the identification, designation, protection, preservation, and enhancement of structures and areas that contribute to the historical heritage of Monterey County. Specifically, Policies PS-12.1 and PS-12.2 call for regular updates to the County's historic preservation plan, Historic Preservation Ordinance, and inventory of cultural resources in the UMC. Policies PS-12.4, PS-12.9, and PS-12.12 support the identification and preservation of state and federal historical and cultural resources and sites through zoning and other regulatory means. The Monterey County Historic Resources Review Board shall review and make recommendations on restoration, rehabilitation, alteration, and demolition proposals affecting identified historical and cultural resources (Policy PS-12.5). Policies PS-12.6 and PS-12.7 support incentives and revenue sources to preserve, restore, and enhance historical and cultural resources.

### Area and Master Plans

#### *North County Area Plan*

Policy NC-3.6 requires that North County Historic Sites and other sites recommended by the Monterey County Historic Resources Review Board be considered for inclusion in the historical resources (HR) zoning district.

#### *Carmel Valley Master Plan*

Policy CV-3.13 requires historical and archaeological resources in Carmel Valley to be reviewed on a site-by-site basis, rezoned to the HR district as a condition of permit approval for any development impacting such sites, and preserved with the integrity of historic sites or structures.

### Monterey County Local Coastal Program – Land Use Plans

#### *North County Land Use Plan*

Key Policy 2.9.1, General Policies 2.9.2, and Specific Policies 2.9.3 encourage maintenance and protection of North County's archaeological resources for their scientific and cultural heritage values. Specifically, General Policies 2.9.2 requires an archaeological survey for development proposed within 100 yards of a floodway or any known archaeological site, unless the area has been previously surveyed and recorded. Specific Policies 2.9.3 requires environmental review for

development proposals in archaeologically sensitive areas or within 100 yards of a floodway or any known archaeological site. Additionally, these policies require avoidance first or adequate preservation and mitigation measures, as necessary, to mitigate potential impacts from development to the maximum extent feasible.

#### *Carmel Area Land Use Plan*

Key Policy 2.8.2, General Policies 2.8.3, Specific Policies 2.8.4 encourage maintenance and protection of Carmel Area's archaeological resources for their scientific and cultural heritage values. Specifically, General Policies 2.8.3 requires an archaeological survey for development proposed in an area of high archaeological sensitivity, unless the area has been previously surveyed and recorded. Specific Policies 2.8.4 require environmental review for development proposals in archaeologically sensitive areas. Additionally, these policies require avoidance first or adequate preservation and mitigation measures, as necessary, designed in accordance with State Office of Historic Preservation and Native American Heritage Commission guidelines.

### Monterey County Code

#### *Section 18.25 et seq. – Preservation of Historic Resources*

The Monterey County Code (County Code) includes provisions for the preservation of historic resources (County of Monterey 2009). It provides review criteria and process in which resources are designated. The County Code also includes guidance to property owners, appeal process, demolition of historical resources, fire and building code requirements, and the requirement to maintain in good repair a historical building or a structure in a historical district.

Title 21 – Zoning (Inland)**Section 21.66.050 – Standards for Archaeological and Tribal Cultural Resource Protection**

The County Code includes development standards for the maintenance and protection of archaeological and Tribal Cultural Resources. This section applies to all new land uses and development in the inland areas of UMC to incorporate all site planning and design features to avoid or mitigate impacts to archaeological and Tribal Cultural Resources to the greatest extent possible and as permitted by law. This section outlines when a development project shall be required to prepare a Phase I archaeological inventory report, reporting format and standards, when subsequent Phase II and/or Phase III archaeological evaluations are necessary, and development standards and mitigation considered appropriate. This section also includes standards and procedures for Native American Tribal consultation.

#### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.110 (Archaeological Resources Development Standards) of the Coastal Implementation Plan provides development standards intended to ensure the

maintenance and protection of North County's archaeological resources. Specifically, development proposed within 750 feet of a known archaeological resource shall be required to obtain a Coastal Development Permit. Further, an archaeological survey report is required for any development project in a "High Archaeological Sensitivity Zone" as mapped on current County resource maps; a "Low or Moderate Archaeological Sensitivity Zone" which requires environmental assessment according to the County's CEQA Guidelines; and 750 feet of a known archaeological resource; or, an area of suspected archaeological resources, as determined through on-site investigation or other available information. North County (Part 2) Section 20.144.140 (Land Use and Development Standards) of the Coastal Implementation Plan provides standards to ensure that future development in North County is clearly consistent with the protection of the area's significant human and cultural resources, as well as agricultural, natural resources, and water quality.

Carmel Area (Part 4) Section 20.146.090 (Archaeological Resources Development Standards) of the Coastal Implementation Plan provides development standards intended to ensure that areas considered to be archaeologically sensitive be maintained and protected for their scientific and cultural heritage values. This section includes similar requirements as those in North County (Part 2) Section 20.144.110 for Coastal Development Permits and archaeological survey reports for proposed development in and near archaeologically sensitive areas.

### Historic Resources Review Board

The Monterey County Historic Resources Review Board, created in July 1988 by Ordinance 3255, is intended to promote the Public Health, Safety, and General Welfare by providing for the identification, protection, enhancement, and use of improvements, structures and areas in Monterey County that reflect special elements of Monterey County's architectural, artistic, cultural, historical and heritage aspects. The Historic Resources Review Board must include at least seven residents of the Monterey County, including five professionals in historic preservation related disciplines and two members from the general public who have demonstrated special interest, competence, knowledge, or experience in historic preservation related disciplines.

### Monterey County Register of Historic Resources

The Monterey County Register of Historic Resources (County Register), most recently updated in October 2025, includes the names, addresses, accessor's parcel numbers, and registry(ies) that each historical resource is identified on (County of Monterey 2025). This register is maintained and regularly updated by the Monterey County Historic Resources Review Board.

### Monterey County Guidelines for Historic Assessments

The County Department of Housing and Community Development (HCD)'s Guidelines for Historic Assessments provides the general requirements for the preparation of cultural reports so

that environmental effects are evaluated in a consistent, objective manner (County of Monterey 2008b). In addition, it provides guidance on determining the significance of a resource and is primarily for property specific evaluations.

### Native American and Archaeological Resources Technical Advisory Panel

The purpose of the Native American and Archaeological Resources Technical Advisory Panel is to provide technical assistance to staff in determining how best to address monitoring and site treatment consistent with the policies of the 2010 General Plan, and to provide expertise for efforts by historical, educational, or other organizations to improve the public's recognition of Monterey County's cultural heritage in the non-coastal or inland areas of Monterey County. The Native American and Archaeological Resources Technical Advisory Panel must comprise up to 15 members with a demonstrated interest in Tribal Cultural Resources preservation and appointed by the County of Monterey Planning Commission.

## 4.5.2 Environmental Setting

The following sections describe the history of Monterey County and discuss known cultural resources, archaeological resources, and built environment resources in or around the project area. Cultural resources are the traces left by prehistoric or historic people who inhabited the Monterey County region. They encompass both the built and the archaeological environments, and could include Tribal Cultural Resources (refer to Section 4.17, Tribal Cultural Resources). The following cultural background (prehistoric, historical, and ethnographic) is taken from the County's 2010 General Plan Environmental Impact Report (EIR) (County of Monterey 2008a).

### 4.5.2.1 Prehistoric Period

The earliest human presence in what is now Monterey County probably dates back as far as 10,000 to 12,000 years ago. The first inhabitants were nomadic hunters, banding together in small groups, following game herds for their subsistence. The earliest settlements began to appear around 7,500 to 8,000 BCE These occupation sites, which comprised small villages, indicate a cultural shift to a different form of subsistence based on exploitation of a broader range of local resources, including marine and freshwater food sources (fish and shellfish), game (rabbits, deer, elk), acorns, and wild roots, and nuts and berries. By 6,000 BCE, at least four such village sites from this period are known to have existed in the area around Moss Landing and Elkhorn Slough, undoubtedly because of the abundance of resources in this area.

A little later, a second shift occurred, again reflecting a change in subsistence strategy that is evident in changes in prehistoric settlement patterns. This change is thought to have occurred because of in-migration of a different people from the north, who were part of a larger movement emanating from farther east. During the middle period (2,500 to 1,600 years ago), villages became larger but fewer in number. They were augmented by a large number of small, widely distributed

sites for the collection, processing, and distribution of resources. This new settlement pattern reflects a fundamental shift in strategy from smaller sites dependent on proximity to resources, to villages supported by outlying sites specializing in collecting and processing resources. Rather than being constrained to living near the food source, the people developed a specialized system to collect and transport resources to population centers.

This new strategy of collection rather than foraging allowed an even broader use of resources and over time resulted in a larger population. The ocean and nearby salt and freshwater marshes were used in conjunction with the oak woodland, savanna, and grassland habitats that provided game, acorns, and other resources. The larger collection strategy enabled early inhabitants to expand in number. The specialization of roles allowed the culture to develop. Instead of generalized foraging, individualized skills developed, such as production of arrowheads, musical instruments, shell beads, and tools. During this middle period of prehistory, the local Indigenous culture reached its peak in terms of cultural expressions of concentrated wealth.

During the period between CE 900 and 1,100, a severe climatic shift began. There was a warming period in which the ocean temperature rose, perhaps not unlike a prolonged El Niño event. The marine and coastal environment became less productive and less reliable as a food source. These conditions necessitated another adaptation in subsistence strategy, stimulating further movement inland and greater dependence on acorns as a staple food. Acorns were particularly useful because they could be stored for as long as a year, providing a secure supply of winter food. The climate change led to a redistribution of occupation sites into many different environments. Villages became further disseminated and very seasonal. The overall effect was decentralization with many new sites farther inland. Settlement sites became specialized according to seasonal use, differentiating into winter and summer sites. In wintertime, occupants would move inland, seeking the shelter and resources in inland canyons and habitats. At this time Rancho San Carlos was first occupied intensively, as a winter village site. The resource-rich regions of what is now Fort Hunter Liggett, along the Nacimiento River, were also intensively occupied at the same time.

At roughly CE 1500, the climate shifted again, entering what is known as the Little Ice Age, a colder period which lasted until at least CE 1800. Collection behavior became very specialized and migratory. The Indigenous people were still in this middle period of subsistence behavior when Spanish explorers saw them for the first time.

#### 4.5.2.2 Ethnohistoric Period (Post CE 1769)

### Costanoan/Ohlone

The Costanoan were speakers of languages in the Penutian language family. The Costanoan, now commonly referred to as Ohlone, consisted of over 50 Tribal groups, speaking eight different but related languages that included Karkin (northern and southern portions of the Carquinez Strait); Chochenyo (east shore of San Francisco between Richmond and Mission San Jose and probably

Livermore Valley); Tamien (southern San Francisco Bay and lower Santa Clara Valley); Ramaytush (San Mateo and San Francisco Counties); Awaswas (Santa Cruz Costanoan between Davenport and Aptos); Mutsun (Pajaro River drainage); Achastan/Rumsen (lower Carmel, Sur, and lower Salinas Rivers); and Chalon (Salinas River). This territory encompasses a lengthy coastline as well as several inland valleys.

The Ohlone relied on gathering, hunting, and fishing to procure a wide variety of flora and fauna for subsistence and material needs. The Ohlone had both permanent village locations and seasonal camps to take advantage of the diverse terrain along the central coast. The first Spanish encounters with the Ohlone occurred as early as 1602 with the Sebastian Vizcaino navigational expedition, followed by the inland exploratory expedition of Gaspar de Portola in 1769. Seven missions were established in Ohlone territory between 1770 and 1797. Ohlone were both forcibly and voluntarily brought to the missions along with other Tribes, including Yokuts, Miwoks, Esselen, and Patwin. Once part of the mission system, the Ohlone were discouraged or forced from practicing their traditional rituals and social activities. Contact with Euro-Americans resulted in a drastic reduction of population due to disease, violence, and a declining birth rate. The Ohlone population fell from an estimated 10,000 in 1770 to fewer than 2,000 by 1832. Following secularization of the missions in 1834, most of the remaining Ohlone moved into growing towns and surrounding ranchos to work as laborers or domestic servants. By the mid-twentieth century, the Ohlone population was reduced to 130 in the San Francisco Bay Area, although some research suggests that in the early 1970s there may have been approximately 200 surviving Ohlone.

In the 1960s, the Ohlone Indian Tribe was incorporated as a formal organization, now holding title to the Ohlone Indian cemetery in Fremont, California. In the 1970s, the Pajaro Valley Ohlone Indian Council was created and was actively preserving sites of traditional importance. Four Ohlone groups had sought recognition: the Amah-Mutsun Tribal Band, the Carmel Mission Band, the Indian Canyon Band, and the Muwekma/Ohlone Tribe. Similarly situated as previously Federally Recognized Tribal groups, were the Ohlone Costanoan Esselen Nation of the Monterey Bay region, historically identified by the Bureau of Indian Affairs under the jurisdiction of the Reno and Sacramento Agencies as the Mission San Carlos Indian Band and Monterey Band of Monterey County, and the Amah-Mutsun Tribal Band identified by the Bureau of Indian Affairs as the San Juan Bautista Band. The Muwekma Ohlone Tribe has historically used the term "Ohlone" throughout the twentieth century. On their 1928–1932 and 1968–1972 Bureau of Indian Affairs enrollment applications, the families used either Ohlone or Mission San Jose Tribe. The Amah-Mutsun community used only Mission San Juan Bautista Tribe, and the Monterey community used either Esselen or Mission Carmel Tribe.

There have been continued efforts to document genealogies by using mission records to piece together family and Tribal history. The groups mentioned above, as well as other individuals, have been actively involved in the management and preservation of their heritage and are frequently

involved in the management of cultural resources. Ohlone descendants continue to conduct ceremonies and traditional practices such as the gathering of plant materials for basket making. Some of these activities are known to take place on Fort Ord Public Lands in the Central Coast Management Area.

### Esselen

Peoples of the Esselen language group inhabited the area south of Monterey, including the upper drainage of the Carmel River south to the vicinity of Junipero Serra Peak and west to the Sierra de Salinas. The area encompassed a 25-mile stretch along the Pacific Coast. Research in the early 1970s recognized six Esselen tribelets: Excelen, (Carmel Valley), Echilatg (Santa Lucia Range), El Pino (lower Arroyo Seco), Cuchunu (Arroyo Seco), Eslenajan (near Soledad Mission), and Tucutnut (Carmel River). Very little is known about the lifeways of the Esselen prior to Euro-American contact. Documentation of Esselen lifeways has been minimal, and much of what is known about the group is gleaned from archaeological research and mission records. The population of the Esselen in the eighteenth century is estimated at 500 to 1,285 people. With the founding of Mission San Carlos Borroméo de Monterey at Carmel in 1770, many Esselen were moved to the mission. It has been suggested that by the mid-1800s they were totally absorbed into the mission population, where many also perished. Families have taken steps to preserve their history and identities as Esselen by founding the Ohlone Costanoan Esselen Nation, currently located in and around Carmel Valley. The Ohlone Costanoan Esselen Nation consists of 500 members and has been petitioning the federal government to regain recognition as a formal Federally Recognized Tribe.

#### 4.5.2.3 Historical Period

Monterey County has been called the “cradle of California history,” owing to its central position relative to historical activities. Monterey Bay became the focus of several Spanish exploratory expeditions after it was first noticed by Juan Cabrillo in 1542. Sebastian Vizcaino, who sailed into it in 1602, named the bay after Conde de Monterrey, Viceroy of Spain. The Franciscans founded three missions (San Carlos Borroméo, San Antonio de Padua, and Nuestra Soñora de Soledad) in what is now Monterey County, and these, along with the Presidio established in the late 1700s and eight large ranchos that formed from land concessions to Spanish army veterans, became focal points of activity.

When the Mexican Republic formed in 1822, the missions were secularized and new ranchos developed on 68 Mexican land grants. A robust economy emerged, based on cattle ranching on these large ranchos, some of which exceeded 10,000 acres. This economy received a great boost when the Mexican regime opened Monterey harbor to foreign trade. The Custom House in Monterey became the site for collection of duties, providing the main source of income for Alta California’s

government. The harbor enabled rancheros to trade their hides and tallow for products from around the world. This commercial vitality led to Monterey's role as the Mexican capital of California.

In May 1846, the United States declared war against Mexico, beginning the Mexican-American War. Commodore John Drake Sloat sailed into Monterey Bay two months later and demanded surrender of the port. On orders to secure men and horses for the war in Southern California, Lieutenant Colonel John C. Fremont arrived in Monterey as well. In November, as Fremont and his men were driving horses from San Juan Bautista to Monterey, Californios led by Manuel Castro attacked them. The Battle of Natividad was the only military engagement fought in Northern California during the Mexican-American War. Organized resistance to the American occupation ended in 1847. On February 2, 1848, the Treaty of Guadalupe Hidalgo was signed, giving the United States possession of Alta California.

Monterey continued to play a key role for some time after the Mexican-American War. At the beginning of the American period, the convention to draft and sign California's new constitution convened at Colton Hall in Monterey, considered California's finest building at the time. This period coincided with the California Gold Rush, and the market for tallow and hides shifted to a demand for beef to feed the population of gold prospectors. By the 1870s, dairy farming was introduced in the area around Gonzales and Soledad. This enterprise required irrigation to support alfalfa production, a practice based on rudimentary canal systems used earlier by friars at the missions.

In 1863 and 1864, a disastrous drought wiped out the cattle industry. Grain production quickly became Monterey County's principal activity. Between 1857 and 1865, Monterey County's grain acreage increased from 2,450 to 27,358 acres. The resulting grain surplus was an incentive to build the harbor at Moss Landing from which farmers could ship their grain products worldwide. Bixby's Landing played a similar role for the export of tanbark and lumber from the Big Sur coast. Transportation soon became a major factor in supporting the Monterey County's growing economy. In 1872, the Southern Pacific Railroad extended its rail line to Salinas from Pajaro. As the railroad pushed farther south, it opened new markets and stimulated settlement of new towns. From Salinas, it extended southward to Chualar, followed by Gonzales and Soledad, as landowners donated rights-of-way across their ranches. With this new transport capability, grain could be loaded at Soledad, expanding the acreage available for cultivation. By 1875, nearly 100,000 acres of grain were harvested in Monterey County, making it one of California's principal grain-producing regions.

In the 1880s, a transformation began in the lower Salinas Valley, initiated by systematic draining and reclamation of the extensive marshland and several dozen lakes in the northern end of the valley. By the 1880s, Chinese laborers had cleared 1,000 acres of land, increasing its value from $28 to $100 an acre. As land prices rose, dry farmers and cattle and sheep ranchers sold out or shifted to row crops.

Widespread sugar beet cultivation in the Salinas area prompted Claus Spreckels to open what was then the largest sugar beet refinery in the world in 1899, south of Salinas. Capacity of the plant reached 3,000 tons of beets per day—more than all of the other refineries in California combined. Spreckels also built the town that still bears his name around the facility. The community of Spreckels was one of California's few company towns and was home to a variety of businesses, a school, a church, and cottages for company employees.

The extension of the railroad, improved irrigation systems, refrigerated freight cars, and other innovations in technology transformed the agricultural economy of the Salinas Valley, further opening up cultivated lands to row crops in place of dry farming dominated by grain crops. This development established the basis for the Salinas Valley's modern economy.

In the late nineteenth century, Monterey County became a destination for tourism and resort activities. Three resorts with hotels developed at Paraiso, Tassajara, and Slates Hot Springs. Pacific Grove was founded as a religious and cultural retreat, growing from a tent city to a town of small Victorian cottages. In the early 1900s, Pebble Beach was subdivided and became a fashionable summer resort. In Carmel, the Arts and Crafts movement took hold in local architecture, as the town became a colony for artists and writers.

On the coast, at Moss Landing and in Monterey, sardine fisheries flourished for a little less than two decades between 1931 and the late 1940s. The cannery buildings at both of these locations are historical remnants of that brief period before the sardines and then the canning industry disappeared.

#### 4.5.2.4 Previous Investigations and Records Search Results

A records search was conducted for areas in and around the project area at the Northwest Information Center (NWIC) using the California Historical Resources Information System (CHRIS), the NRHP, CRHR, and County Register. The records search at the NWIC identified a total of 208 previously conducted cultural studies in and around the project area. Twenty-nine cultural resources sites have been previously recorded in and around the project area consisting of six prehistoric, 22 historic, and one multi-component sites. Table 1 of Appendix H (Previously Recorded Cultural Resources within the Project Area), and the following discussion provides a summary of the previously recorded resources in and around the project area.

### Prehistoric (Archaeological) Sites

The prehistoric sites include two habitation (P-27-000138/CA-MNT-000002 and P-27-000385/CA-MNT-000280), one game field (P-27-000158/CA-MNT-000022), artifact scatters (P-27-001021/CA-MNT-0009650 and P-27-003666), and one mortar bowl rim fragment (P-27-002900/CA-MNT-002257).

**P-27-000138/CA-MNT-000002.** P-27-000138/CA-MNT-000002 (habitation) was originally recorded by A.R. Pilling in 1948 who identified bedrock milling features and pestles. In 1975, Stafford, William Roop, Gary Berg, and Kathy Flynn surveyed the site (Roop et al. 1975). They noted that the new Reservation and River Roads had cut through the site which had almost totally destroyed it. In 1982, William Roop again evaluated the site and identified a midden deposit consisting of dense shell lenses, burned rock, chert flakes, ground stone tool fragments (Roop 1982). He described the site as extending from the bluff edge that forms the northeasterly edge of the parcel, upslope along both sides of Reservation Road for a distance of 1200 feet. Mary Gerbic and Alex DeGeorgey monitored the site for the PG&E DFM 813-01 project (Gerbic and DeGeorgey 2013). Midden soils were identified; however, they were absent of artifacts or ecofacts. The last evaluation occurred in 2019 by Sarah Brewer and Scott Miller for the installment of an overhead fiber-optic cable. No artifacts or midden soils were identified (Brewer and Miller 2019a).

**P-27-000385/CA-MNT-000280.** According to Phil Kaijankoski, P-27-000385/CA-MNT-000280 (habitation) was originally recorded in 1950 by A.R. Pilling (Pilling 1948). He identified the site as bulldozed and destroyed ca. 1940 (Kaijankoski 2020). It is unknown if Pilling visited the site, or if he recorded it based on correspondence with a reporter from the Monterey Peninsula Herald. An attempt to search the archives of that newspaper for information about this site was unsuccessful." Sarah Brewer and Scott Miller surveyed the site in 2019 and did not encounter any cultural materials (Brewer and Miller 2019b). Eleni Ziogas also surveyed the site in 2019 as part of the Caltrans Scenic Route 68 survey. Efforts to identify the site were unsuccessful. CA-MNT-3, and CA-MNT-4/267, two habitation sites with subsurface deposits, are roughly 30 and 100 meters south of CA-MNT-280 are identified in the Scenic Route 68 Caltrans corridor. Ziogas suggest that these two sites likely encompass CA-MNT-280, or reflect associated activity areas, and suggest that subsurface deposits may extend under Scenic Route 68 and into the Caltrans Right-of-way. The final evaluation by Kaijankoski, identifies that "previously, the Northwest Information Center did not have a location for this trinomial; however, when transitioning to a geographic information system (GIS) mapping interface the entire extent of Fort Ord, a 45-square-mile area (28,800 acres) northeast of Seaside, was selected as the boundaries of CA-MNT-280." He conducted testing at a portion of the site east of San Benancio Road with negative results.

**P-27-000158/CA_MNT-000022.** P-27-000158/CA-MNT-000022 was recorded in 1948 by A.R. Pilling and Ann Fisher (Pilling and Fisher 1948). It is recorded as "a flat area supposed to have been game field in pre-mission period." Updated surveys and evaluations have not occurred at this site.

**P-27-001021/CA-MNT-0009650.** P-27-001021/CA-MNT-0009650 was originally recorded in 1979 by Trudy Haversat, who recorded the site based on an informant report (Haversat 1979). The informant recovered a stone bowl while excavating a fence post. The site was tested in 1986 by Gary Breschini and Trudy Harvest (Breschini and Haversat 1984). A lithic scatter consisting of a small number of chert and obsidian flakes was recovered.

**P-27-003666.** P-27-003666 was recorded by Gail Bellenger in 2018 (Bellenger 2018). The site consists of ground stone tools that were not in situ and out of context. According to Bellenger, the artifacts were likely a surface expression of the original location but were relocated to a created hill, likely due to agricultural activities. Surface collection and testing were conducted, and it was determined that the adjacent fallow field is likely the original context for these artifacts. Bellenger identified the site as "eligible to both the NRHP and the CRHR due to its importance in the cultural sequence of the Indigenous Ohlone/Esselen people, and because it is close to the Carmel Mission that would have most likely been located to existing villages or encampments."

**P-27-002900/CA-MNT-002257.** P-27-002900/CA-MNT-002257 was recorded by Patrick Cave (Cave 2008). He identified the site as a large prehistoric site with midden soils, fire-affected rock, small mammal bone fragments, chert debitage, and shell. A basalt mortar bowl rim fragment was collected. According to Cave, the "site is terminated on the northeast by Merritt Street, and on the west by the graded southwest extension of Poole Street. The site extends southwest to the floodplain of Tembladero Slough, and is visible to the east on adjacent parcels south of Union Street." The site was tested with positive results confirming areal extent and site depth. He identified that the "site had been partially disturbed due to dirt road traffic, parking and soil discing. However, it should be mostly pristine just below the surface on most of the parcel."

### Historical Resources and Multi-Component Sites

The historical and multi-component resources include structural remains of a hangar for the first commercial airport on Monterey Peninsula (P-27-000090/CA-MNT-001801H), Fort Ord buildings, structures, and features (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, P-27-002747, P-27-002749, and P-27-002912), Pajaro River levee (P-27-004178), single-family residences (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252), Rancho Canada Golf Course (P-27-004262), and the Carmel River/Esselen Trail (P-27-004056).

**Monterey Peninsula Airport Hangar Structural Remains (P-37-000090/CA-MNT-001801H).** P-27-000090 consists of the structural remains of a hangar constructed in 1928 and associated with the first commercial airport on the Monterey Peninsula. It was built on a north–south axis, and included wood frame construction with corrugated, galvanized metal walls and roof. Sliding doors were present at both ends of the hangar. Maddux Airlines of San Diego, the only commercial airline to use the field and facilities, constructed the hangar. The site includes two features: (1) structural remains, and (2) watering trough. The site was used as an airplane hangar (1928–1936), and subsequently was used as an agricultural watering station and equipment storage. According to Wake et al. (1993), site integrity has been impacted to a great degree by cattle grazing, wind, and vandalism, and 90 percent of the surface has been disturbed to a maximum depth of 1 foot.

**Fort Ord.** Fort Ord was established in 1917 as a training and staging facility for infantry troops. The base was decommissioned in 1991 and formally closed in 1994. Buildings and structures (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, P-27-002747, P-27-002749, and P-27-002912) were assessed for historical significance between 2003 and 2007 (Stock 2003, 2006; Holman and Associates 2005; 2007; Alexander et al. 2005; 2007). The majority of the identified buildings, including the mess halls (T27 and T29-38), latrine and showers (T74-83), recreation buildings (T-85, T-90, T-98-100, T-106), warehouse (T-120-121, T-1321), post office (T-101), firehouse (T-105), and auto shop (T-138, T-140) and buildings (T-23-24, T-87, T-97, and T-104), on record with the NWIC were recorded and evaluated for Section 106 review by Jody R. Stock. All structures except T-85 were determined eligible for listing on the NRHP under criterion A. According to Stock (2003), buildings T-138 and T-140 did not retain the same amount of integrity as the balance of the structures. Building T-138 was identified as having been "altered with a large metal, roll-down door on the front façade, thereby altering the design, materials, and workmanship." Alexander et. al. recorded Feature EGP-1 and EGP-3 in 2005 and updated the features' status in 2007. Alexander et. al. described the features as follows:

- Feature EGP-1 was a small circular detention pond/reservoir, with an artificially raised berm on the north and east sides only, flanking Inter-Garrison and Chapel Hill Roads respectively. The west and south sides of the pond were contained by rising topography. This berm was about seven feet high on the east side. The pond center was overgrown with willows. There was a wood frame/plank water height gaging station at the east comer with 1 foot increments marked to 8 feet. It was fastened with wire nails. A buried strip of asphalt and a 24-by-60-foot concrete slab were identified on the south half of the east berm during monitoring. The maximum dimensions for the feature were approximately 400 feet by 400 feet. The feature was totally destroyed prior to May 31, 2007 by construction on the East Garrison Project.
- Feature EGP-3 is a wide rectangular artificially flat area (1200 feet east/west, 400 feet north/south) directly west of Feature EGP-1. It was situated between two low ridges and had an all metal post wire fence defining the perimeter. Much of the surface was covered with gravel and had patches of ice plant, coyote bush, plantain, and Russian thistle. There were two nearly identical concrete pads (T-140, T-138) measuring 84 by 38 feet inside, adjacent to a paved access road. These pads had 12-inch-high footing walls on all sides except the street front. Each of these pads had two oblong vehicle repair pits. A flat concrete "modern looking" pad (T-142) measuring 102 by 43 feet was situated north of T-140. The feature area is +/- 11 acres. Monitoring in 2007 identified buried cast concrete saddle tank supports as a 1940s gas or fueling station location; a mortared granite boulder retaining wall fragment; a Hemingray-16 (1919–

1950s) insulator; a buried concrete slab measuring 15 by 10 feet. The feature (EPG-3) was destroyed by May 31, 2007.

Although the area in which these buildings and structures are located has not been formally listed as a historical district under the NRHP or CRHR, many of the buildings and structures are still extant.

**Pajaro River Levee (P-27-004178).** The Pajaro River levee (P-27-004178) was recorded by David Hickman in 2021 (Hickman 2021). According to Hickman, "it was constructed in 1949 by the U.S. Army Corps of Engineers. The levees run from the river mouth to river mile 10.6 on left (south) bank and river mile 11.9 on the right (north) bank, protecting lands around most of the lower reach of the river." Hickman evaluated the resource for significance and determined that "the levee lacks historical significance and does not meet the criteria for listing in the NRHP."

**Single-family Residences (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252).** Single-family residences greater than 50 years in age are identified within the vicinity of the project area (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252). They are all located on Merritt Street (111020, 111040, 111098, 111100, 11150) in Castroville. All are Ranch-style except the residence at 11040 Merritt Street, which was constructed in the Folk Victorian style. These residences were surveyed and recorded for Section 106 review by Steven J. Melvin et.al. for the MON 183 Castroville Improvement Project (Melvin et al. 2019). The structures were determined not eligible for listing on the NRHP or CRHR, and are not listed on the Monterey County Register of Historic Resources.

**Rancho Canada Golf Course (P-27-004262).** The Rancho Canada Golf Course opened in 1970 and was constructed in the Spanish Colonial Revival style. It was recorded and evaluated by James Williams for the Palo Corona Regional Park General Development Plan. The golf course was determined not eligible for listing on the NRHP or CRHR. In addition, it was determined to not be eligible for designation under the County of Monterey regulations.

**Carmel River/Esselen Trail (P-27-004056).** The Carmel River/Esselen Trail is the only identified multi-component resource. The Department of Park and Recreation form prepared by Glenn Yanagi identified that a Department of Park and Recreation form was not prepared for this resource when it was evaluated in 1999 by McCarthy. A portion of the trail was evaluated for the New Los Padres Dam and Reservoir project. It was identified as a Traditional Place/Traditional Cultural Property (TCP) and a contributor to the Xasáuan District. The resource was identified as significant under criterion A of the NRHP based on "knowledge that has been passed down orally through the generations reaching into the last century." The study by McCarthy identified that "portions of the TCP in the New Los Padres Dam and Reservoir project area would be inundated and alter the setting of the remaining portions of the TCP."

## Monterey County Register of Historic Resources

In addition, to the NWIC records search, the County Register was also reviewed. A total of 25 historical resources were identified. The Berwick Manor and Orchard, the Porter Vallejo Mansion, and the Castorville Japanese Language School are listed on both the National Register and County Register. While only three are officially listed on the NRHP, a review of the Department of Park and Recreation forms indicates a pre-contact site (P-27-003666), multi-component site (P-27-004056) (Carmel River/Esselen Trail), and the majority of Fort Ord buildings and structures (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, are P-27-002747) have not been evaluated but may be eligible for listing to the NRHP. In addition, Carmel Valley Airport is listed on the California Register and County Register. One resource, the Meadows House had a designation of "unknown," and the Old Carmelo School had a designation of "potentially eligible for listing."

Table 2 (Cultural Resources Located within Project Area) of Appendix H includes the cultural resources that are listed or may be eligible for listing upon evaluation on the NRHP, CRHR, or County Register in and around the project area.

## Cultural and Archaeological Sensitivity

The opportunity sites are categorized into three levels of cultural sensitivity, low, moderate, and high, based on the archival research, the NAHC Sacred Lands File records search, regional environmental factors, and historic and modern development patterns. These areas of cultural sensitivity are shown in Appendix H, CRTR Figure 5, Confidential Cultural Sensitivity Map, and Figures 5a–5i.[1] A high-sensitivity area refers to a known resource location or its approximate location; a moderate-sensitivity area refers to an area within approximately 0.25 mile of a known or approximate resource location; and a low-sensitivity area refers to an area within 0.5 mile of a known or approximate resource location. Although the exact locations of these resources are withheld pursuant to CEQA Guidelines, Section 15120(d), and CGC Section 6254(r), which requires locations of archaeological and cultural resources to remain confidential in public EIRs and supporting documents, Table 4.5-1, Cultural and Archaeological Sensitivity for Opportunity Sites, summarizes the cultural sensitivity classification for each of the opportunity sites and pipeline sites in relation to these known cultural resources. The areas are identified as "Cultural Sensitivity per CRTR" in Table 4.5-1. The "Site No." column lists the opportunity site number, and the "Acreage" column indicates the total site area assigned to each sensitivity level. For example, within Opportunity Site 5, approximately 3.96 acres are classified as having low cultural sensitivity, while 0.08 acre is classified as having moderate sensitivity.

[1] Exact locations are withheld pursuant to CEQA Guidelines, Section 15120(d), and CGC Section 6254(r), which require locations of archaeological and cultural resources to remain confidential in public EIRs and supporting documents.

Additional archaeological sensitivity information for the opportunity sites is provided through the County GIS map data for UMC. Table 4.5-1 also presents this archaeological sensitivity classification information for each opportunity site. Similar to the columns under the "Cultural Sensitivity per CRTR" subheading in the same table, some opportunity sites fall into two or three categories. For example, within Opportunity Site 7, approximately 277.05 acres are classified as having moderate archaeological sensitivity, while 2.5 acres are classified as having low sensitivity. It should be noted that the sensitivity classifications based on the County GIS map data and the CRTR generally do not correspond. For example, while Opportunity Site 1 falls outside any cultural sensitivity classification in the CRTR, it is assigned low archaeological sensitivity per County GIS map data.

**Table 4.5-1. Cultural and Archaeological Sensitivity for Opportunity Sites**

| Cultural Sensitivity per CRTR | | Archaeological Sensitivity per County GIS | |
|---|---|---|---|
| **Site No.** | **Sensitivity Classification** | **Site No.** | **Sensitivity Classification** |
| 1 | Outside | 1 | Low |
| 2 | Outside | 2 | Low |
| 3 | Outside | 3 | Low |
| 4 | Outside | 4 | Low |
| 5 | Low, Moderate | 5 | High |
| 6 | Low | 6 | High |
| 8 | Low, Moderate | 8 | Low, High |
| 9 | Low, Moderate | 9 | Low |
| 10 | Low, Moderate | 10 | Low |
| 11 | Low, Moderate | 11 | High |
| 12 | Moderate | 12 | High |
| 13 | Moderate | 13 | High |
| 14 | Moderate | 14 | High |
| 15 | Moderate | 15 | High |
| 16 | Low | 16 | Moderate |
| 17 | Low, Moderate | 17 | High |
| 18 | Moderate | 18 | High |
| 19 | Moderate | 19 | High |
| 20 | Moderate | 20 | High |
| 21 | Moderate | 21 | High |
| 22 | Moderate | 22 | High |
| 23 | Moderate | 23 | High |
| 24 | High/Moderate | 24 | High |
| 25 | Moderate | 25 | Low |
| 26 | Moderate | 26 | Low |
| 27 | Moderate | 27 | Low |

**Table 4.5-1. Cultural and Archaeological Sensitivity for Opportunity Sites**

| Cultural Sensitivity per CRTR | | Archaeological Sensitivity per County GIS | |
|---|---|---|---|
| Site No. | Sensitivity Classification | Site No. | Sensitivity Classification |
| 28 | Low, Moderate | 28 | Low |
| 29 | Low, Moderate | 29 | Low |
| 30 | Moderate | 30 | High |
| 31 | High/Moderate | 31 | Moderate |
| 32 | Moderate | 32 | Low |
| 33 | Moderate | 33 | Low |
| 34 | Moderate | 34 | Low |
| 35 | Low, Moderate | 35 | High |
| 36 | Moderate | 36 | High |
| 37 | Moderate | 37 | High |
| 38 | Moderate | 38 | High |
| 39 | Low | 39 | Low |
| 40 | Outside, Low | 40 | Moderate |
| 41 | Moderate | 41 | High |
| 42 | Outside | 42 | Low, High |
| 43 | Moderate | 43 | High |
| 44 | High/Moderate | 44 | High |
| 45 | Outside | 45 | Moderate |
| 46 | High/Moderate | 46 | Moderate |
| 47 | Moderate | 47 | Moderate |
| 48 | Outside | 48 | Low, Moderate |
| 49 | Moderate | 49 | High |
| 50 | Moderate | 50 | High |
| 51 | Moderate | 51 | High |
| 52 | Low, Moderate | 52 | Outside, Moderate |
| 53 | High/Moderate | 53 | Outside, Moderate |
| 54 | Low, Moderate | 54 | High |
| 55 | Moderate | 55 | High |
| 56 | High/Moderate | 56 | High |
| 64 | Moderate | 64 | High |

## 4.5.3 Method of Analysis

### Desktop Survey

Harris staff performed a desktop review to identify existing cultural resources. No field surveys were conducted as part of this review. A records search was conducted at the NWIC for information on known cultural resources in and around the project area. The records search

included a review of all records for historic and prehistoric sites, and historic addresses. In addition, the NRHP, the CRHR, and the County Register were reviewed.

### California Native American Tribal Consultation and Outreach (SB 18)

As part of the CRTR, NAHC was contacted for a Sacred Lands File search to determine whether Sacred Lands are present in the project area. The NAHC provided a positive response to the Sacred Lands File check and recommended that the list of Tribes provided be contacted for more information. The NAHC identified 22 Native American representatives as potentially having local knowledge of Tribal Cultural Resources. All Tribal points of contact on the list provided by the NAHC were contacted by email and/or regular mail for any information they may have regarding Sacred Lands that may be present on the project area. To date, no responses have been received. Tribal outreach documentation is provided in Appendix H to this PEIR. The County is also conducting AB 52 and SB 18 government-to-government consultation. The consultation process with Tribal representatives is still ongoing. Additional discussion regarding AB 52 consultation can be found in Section 4.17.

### Assumptions

Given that the thresholds of significance in this section are primarily based on the location and cultural sensitivity of an area or place (refer to Section 4.5.4, Thresholds of Significance) rather than the number of housing units proposed, this section evaluates each of the opportunity site parcels to determine impacts on cultural resources.

## 4.5.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on cultural resources if it would:

- **Threshold 1:** Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- **Threshold 2:** Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- **Threshold 3:** Disturb any human remains, including those interred outside of dedicated cemeteries.

## 4.5.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to cultural resources that could result from implementation of the project. Four main impacts to cultural resources may occur through the implementation of the project, including (1) the destruction or adverse change to built environment resources, including adverse changes in the elements of historical structures, buildings, features, districts, or landscapes that make them significant resources; (2) the destruction

of known or unknown prehistoric and historical archaeological resources; (3) the potential to disturb Native American human remains; and (4) the destruction or adverse changes to Tribal Cultural Resources. The first three types of impacts are discussed in the following sections and potential impacts to Tribal Cultural Resources are discussed in Section 4.17 of this PEIR.

#### 4.5.5.1 Threshold 1: Historical Resources

**Threshold 1:** Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

### Impact Analysis

The record searches and research prepared for the CRTR included an evaluation of CHRIS records provided by the NWIC, NRHP, CRHR, County Register, Archaeological Resources Directory, Built Environment Resources Directory, and Sacred Lands File search. The evaluation therein identified historical (built) resources within the vicinity of the opportunity sites. Pursuant to CEQA Guidelines, Section 15064.5(b)(1), any project that causes a substantial adverse change in the significance of a historical resource would have a significant effect on the environment. Substantial adverse changes to the significance of a historical resource is defined as the physical demolition, destruction, alteration, or relocation of the resource or its immediate surroundings such that its significance would be materially impaired.

Historical resources near the opportunity sites consist of structural remains of an airplane hangar; Fort Ord buildings, structures, and features; a levee; single-family residences; a golf course; and a multi-component trail. None of these historical resources are on an opportunity site. In Castroville, several historical resources (10599, 10685, 10700, 10701, and 10801 Merritt Street) listed on the County Register are near Opportunity Site 13. The nearest historical resource to this opportunity site is the Castroville School building (10700 Merritt Street), which is approximately 0.1 mile northeast of the opportunity site on the southerly side of Merritt Street. The rest of the historical resources near Opportunity Site 13 are on the northerly side of the street. Implementation of the project would not impact these historical resources because the neighborhood surrounding them has already been developed with more modern construction. These developed areas surrounding the historical resources include intervening structures between Opportunity Site 13 and the listed resources. Therefore, development at Opportunity Site 13 would not alter the setting or diminish the historic integrity of the nearby historical resources. Further, the Castroville Community Plan establishes development standards (e.g., addressing height, density, lot configuration, setback, parking requirements, signage) that have been specifically tailored to implement goals and objectives of the Castroville Community Plan and to protect and enhance the neighborhood character and image of Castroville. Design guidelines are also included in the Castroville Community Plan to address more subjective factors of quality and character of development. Compliance with the Castroville Community Plan development standards and design guidelines

would further ensure that development at Opportunity Site 13 does not impact the historical resources along Merritt Street.

None of the opportunity sites contain a known historical resource as defined under CEQA Guidelines, Section 15064.5(a), at the time of report preparation (April 2026). However, individual building permits were not reviewed for all structures existing in the project area; therefore, opportunity sites could contain buildings or structures that were constructed prior to 1976 (and therefore, are at least 50 years old), or built environmental resources which may meet the age threshold for eligibility when the project is implemented. The 2010 General Plan Public Services Element Goal PS-12 and Policies PS-12.1 through PS-12.7 encourage the identification, designation, protection, preservation, and enhancement of structures and areas that contribute to Monterey County's historical heritage. In addition, the Carmel Valley Master Plan Policy CV-3.13 requires historical resources in Carmel Valley to be reviewed on a site-by-site basis, rezoned to the HR district as a condition of permit approval for any development impacting such sites, and preserved with the integrity of historical sites or structures. Furthermore, County Code (Section 18.25 et seq.) includes provisions for the preservation of historical resources. Therefore, a site-specific analysis would be required when subsequent projects are proposed if structures 50 years or greater are present. Also, unevaluated historical resources may require research and evaluation to determine their eligibility for inclusion in the CRHR, NRHP, or County Register.

Because there is potential for unrecorded historical resources to occur on the opportunity sites, project implementation could potentially cause a substantial adverse change in the significance of a historical resource and result in a potentially significant impact. However, implementation of Mitigation Measure (MM-) CUL-OBJ-, MM-CUL-CONS-2, MM-CUL-OBJ-3, and MM-CUL-CONS-4 would minimize the potential for adverse effects to historical (built) resources. Projects that follow the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards) would be mitigated below the level of significance.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Preparation of a historical resource assessment and protection is required for all projects that streamline under the Objective Process or the Consistency Process of the HEU6 through MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3 and MM-CUL-CONS-4 below.

**MM-CUL-OBJ-1: Historic Resources Assessment.** By-right residential developments streamlining under the Objective Process shall be required to prepare and submit a historic assessment as part of the development application for review by the County when a project has the potential to affect a building, site, objects, or structures over 50 years

old. A Phase I Historic Assessment shall be prepared by a qualified historic consultant pursuant to the County of Monterey Guidelines for Historic Assessments. The Historic Assessment shall determine if a resource is historic by using criteria from the National Register of Historic Places, the California Register of Historical Resources, and Monterey County's Register of Historic Places. If it is determined that a resource is eligible for listing on one or more of these Registers, then a Phase II Assessment shall be prepared.

A Phase II Historic Assessment shall be prepared by a qualified historic consultant and shall provide a more detailed evaluation of the resource and examine how a project will affect its significance. If the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place is not feasible, then MM-CUL-OBJ-3 shall apply.

**MM-CUL-CONS-2: Historic Resource Assessment.** Applicants for developments streamlining under the Consistency Process shall be required to prepare and submit a historic assessment as part of the development application for review by the County when a project has the potential to affect a building, site, objects, or structures over 50 years old.

Refer to MM-CUL-OBJ-1 above for all standards and requirements for MM-CUL-CONS-2.

**MM CUL-OBJ-3: Historic Resources Protection.** By-right residential developments streamlining under the Objective Process shall be required to document, implement treatment measures, and incorporate interpretive measures if the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place of a built environment resource is not feasible. The required documentation shall be provided as part of the development application for review by the County, and shall include the following:

1. Implement documentation and treatment measures consistent with the Secretary of the Interior's Standards for Architectural and Engineering Documentation (Historic American Buildings Survey [HABS]/Historic American Engineering Record [HAER]/Historic American Landscape Survey [HALS]) prior to construction activities that would cause significant impacts. Documentation shall include:
    a. Photographic Recordation: Digital color photographs and large-format archival-quality photographs of the exterior and interior (where accessible) of the resource, including representative architectural features, spatial relationships, and character-defining details.
    b. Written Documentation: A written description of the resource's history, context, architecture, and significance, drawing upon available primary and

secondary sources (e.g., Sanborn maps, building permits, census records, historical photographs, and prior evaluations).

c. Measured Drawings (if appropriate): Scaled floor plans, elevations, and/or site plans prepared to HABS/HAER/HALS standards, if feasible and warranted by the resource's level of significance.

d. Archival Curation: Documentation shall be compiled in a permanent archival-quality report and submitted to the appropriate local historical society, library, archives, and/or the California Historical Resources Information System regional information center for permanent curation and public accessibility.

2. In addition, where feasible, the project applicant or project proponent shall incorporate interpretive measures to commemorate the historical significance of the resource, such as public signage, exhibits, brochures, or web-based content.

**MM CUL-CONS-4: Historic Resources Protection.** Applicants for developments streamlining under the Consistency Process shall be required to document, implement treatment measures, and incorporate interpretive measures if the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place of a built environment resource is not feasible. The required documentation shall be provided as part of the development application for review by the County.

Refer to MM-CUL-OBJ-3 above for all standards and requirements for MM-CUL-CONS-4.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.5.5.2 Threshold 2: Archaeological Resources

**Threshold 2:** Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

### Impact Analysis

The record searches and research prepared for the CRTR included an evaluation of CHRIS records provided by the NWIC, NRHP, CRHR, County Register, Archaeological Resources Directory, Built Environment Resources Directory, and Sacred Lands File search. The evaluation therein identified pre-contact and historical archaeological sites within the vicinity of the opportunity sites. Based on the background search and research, it is known that the project area was used by pre-contact and historic people. As such, additional unrecorded archaeological resources may be present in the project area. A significant impact to archaeological resources could occur if the resource is a historical resource as defined in CEQA Guidelines, Section

15064.5(a), or if it meets the definition of a unique archaeological resource in PRC Section 21083.2(g). An adverse impact includes the destruction or disturbance of a significant archaeological site or any portion of an archaeological site that contains or has the potential to contain information important to history or prehistory.

As discussed in Section 4.5.2.4, there are six known pre-contact resources in and around the project area:

- Two habitation (P-27-000138/CA-MNT-000002 and P-27-000385/CA-MNT-000280),
- One game field (P-27-000158/CA-MNT-000022),
- Artifact scatters (P-27-001021/CA-MNT-0009650 and P-27-003666), and
- One mortar bowl rim fragment (P-27-002900/CA-MNT-002257).

These resources are distributed in the planning areas of the Fort Ord Master Plan, Toro Area Plan, Carmel Valley Master Plan, Greater Monterey Peninsula Area Plan, and North County Inland Area Plan.

Not all recorded historical or pre-contact resources have been fully evaluated to determine their significance as archaeological resources, and the opportunity sites themselves have not been individually assessed. Project-related ground-disturbing activities have the potential to encounter previously unrecorded cultural resources. Activities such as clearing, trenching, and grading could damage or destroy archaeological resources that may be present on or below the ground surface. Adverse effects to known or uncovered significant or unique archaeological resources could result in the loss of valuable information or preclude potentially eligible sites from being listed in a local, state, or federal register of historical resources. Therefore, site-specific analysis would be required when future residential development projects are proposed. Unevaluated cultural resources may require additional research, evaluation, or testing to determine their eligibility for inclusion in the NRHP, CRHR, or County Register.

To comply with all relevant site-specific County regulations and policies including the Conservation and Open Space Element Goals and Policies (Goal OS-6 and OS-8; Policies OS-6.1 through OS.6-5, and OS.8-1 through OS.8-7), Public Services Element Goals and Policies (Goal PS-12; Policies PS-12.4, PS-12.5, PS-12.9, and PS-12.12), Carmel Valley Master Plan (Policy CV-3.13), North County Land Use Plan (General Policy 2.9.2, and Specific Policy 2.9.3), Carmel Area Land Use Plan (General Policy 2.8.3, and Specific Policy 2.8.4), and County Code, Section 21.66.050, Standards for Archaeological and Tribal Cultural Resources Protection (refer to Section 4.5.1.3) a Phase I Inventory of Archaeological Resources is required for future development streamlined under the HEU6, meeting the standards contained in Subsection D of the same section, based on the archaeological sensitivity as mapped on the County's archaeological resource maps. However, regardless of the County's mapped archaeological sensitivity, the potential for previously unidentified archaeological resources exists in the project area.

As shown in Table 4.5-1, all opportunity sites are classified as having one or more low, moderate, or high archaeological and/or cultural sensitivity designations, and some sites fall within multiple categories. Additionally, the sensitivity classifications derived from the County's GIS map data and those identified in the CRTR are not fully consistent. In certain areas, the County's existing mapping identifies an opportunity site as being in a high-sensitivity area, whereas the technical memorandum identifies it as low sensitivity, and vice versa. Therefore, a site-specific evaluation would be required to ensure that adequate protection of archaeological resources is provided.

Implementation of the project could potentially cause substantial adverse change in the significance of archaeological resources and result in a potentially significant impact without mitigation. To reduce the potential for direct impacts from damage and disturbance to significant archaeological resources, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would be required.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Preparation of an archaeological resource assessment, and avoidance, preservation, and/or data recovery measures will be required for all projects processed under the HEU6 through MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 below.

**MM-CUL-OBJ-5: Archaeological and Tribal Cultural Resources Protection.** To comply with all relevant site-specific County regulations and policies, in areas with documented or inferred historical, archaeological, or Tribal Cultural Resources—such as areas of high, moderate, or low cultural sensitivity as identified on current County resource maps or in Table 4.5-1, Archaeological and Cultural Sensitivity for Opportunity Sites, of the Draft Program Environmental Impact Report—the project applicant or project proponent shall retain a qualified archaeologist to prepare an archaeological resources assessment report in accordance with professional standards as outlined in the Archaeological Resource Management Report Guidance (California 1990), as part of the development application package.

The Phase I, Phase II, and Phase III report requirements are as follows:

1. Phase I Inventory of Archaeological Resources: A Phase I Inventory of Archaeological Resources shall include, at a minimum, a records search of available resource information at the Northwest Information Center of the California Historic Resources Information System. This records search will, at a minimum, determine whether a part or all of the project area has been previously surveyed for archaeological resources, whether any known archaeological

resources have already been recorded on or adjacent to the project area, and whether the probability is low, moderate, or high that archaeological resources are in the project area. Following the background research, a field survey by a professional archaeologist shall be conducted in accordance with accepted standards and practices. The field survey shall include, at a minimum, an inspection of the site for evidence of surface and, if appropriate, subsurface archaeological resources.

a. If the Phase I Inventory of Archaeological Resources investigation reveals that the site does not contain archaeological resources, no further review is necessary unless otherwise noted by the archaeologist.
b. If the Phase I Inventory of Archaeological Resources investigation reveals any information indicating that the site is likely to contain archaeological resources, a Phase II Evaluation of Archaeological Resources shall be required unless either of the following applies:
    i. There is substantial evidence, absent the Phase II Evaluation, that the project will have a significant impact on archaeological resources and those impacts cannot be avoided, in which case a Phase III Plan may be prepared without a Phase II Evaluation; or
    ii. If the location of resources can reasonably be determined based on the Phase I Inventory and all development is located to avoid impacts to those identified resources, no further archaeological reports are necessary if the conditions recommended by the archaeologist are applied to the project.

2. Phase II Evaluation of Archaeological Resources: A Phase II Evaluation shall be prepared with the goal of determining site boundaries, an evaluation of the site's significance pursuant to California Public Resources Code, Section 21083.2(g), and an evaluation of avoidance measures pursuant to Subsection E.1 of County Code, Section 21.66.050, if applicable. A Phase II Evaluation may include test excavations when adequate data from previous reports are not available to assess a site's significance; upon completion of testing and assessment of archaeological resources, , the archaeologist shall curate materials to an archival center in Monterey County or repatriate materials to a culturally affiliated Tribe, as appropriate. This does not relieve an owner or owner's representative from following the process mandated by law when human remains are involved.

    a. If no unique archaeological resources are found during the Phase II Evaluation, no further reports are necessary. Despite a negative finding in the Phase II Evaluation, conditions recommended by the archaeologist and the California Native American Tribe through the consultation process shall be applied to the project as appropriate.

b. If the Phase II Evaluation of Archaeological Resources determines that unique archaeological resources may be present, the Phase II Evaluation shall include consideration of the avoidance measures required in the 2010 General Plan Open Space and Conservation Element Policy OS-6.5, North County Land Use Plan Key Policy 2.9.1 and General Policies 2.9.2, Carmel Area Land Use Plan Key Policy 2.8.2 and General Policies 2.8.3, and Subsection E.2 of County Code, Section 21.66.050. If significant resources cannot be avoided, a Phase III Data Recovery Plan shall be prepared.
c. The 2010 General Plan Open Space and Conservation Element Policy OS-6.5, North County Land Use Plan Specific Policies 2.9.3, Carmel Area Land Use Plan Specific Policies 2.8.4, and Subsection E.2 of County Code, Section 21.66.050, indicates that mitigation based on a Data Recovery Plan (Phase III Plan) is allowed only upon a showing by the project applicant or project proponent, based on substantial evidence, that avoidance is not feasible. Prior to the Data Recovery Plan being accepted as complete by the County Director of Housing and Community Development, evidence shall be submitted demonstrating that avoidance is not feasible.

3. Phase III Data Recovery Plan: A Phase III Data Recovery Plan shall evaluate a project's impacts on unique archaeological resources and shall set forth the reasons, based on substantial evidence, why avoidance measures required in Subsection E.2 of County Code, Section 21.66.050, are not feasible under the circumstances of the case. A Data Recovery Plan shall follow the Secretary of the Interior's Guidelines for Archeological Documentation. The Phase III Plan shall include treatment of archaeological resources with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including but not limited to the following:
   a. Protecting the cultural character and integrity of the resource;
   b. Protecting the traditional use of the resource; and
   c. Protecting the confidentiality of the resource.
4. Report Format and Standards:
   a. In all cases, written reports shall be prepared consistent with the report format requirements contained in the State Office of Historic Preservation Archaeological Resource Management Reports: Recommended Contents and Format guidelines. A single report may incorporate more than one Phase where appropriate to minimize redundancy and expense. All reports shall be filed with the appropriate state agencies.
   b. Submittal of the applicable report(s) to the County Director of Housing and Community Development shall be required prior to a project application being considered complete.

c. The report(s) shall be prepared, at the project applicant or project proponent's expense, by a qualified archaeologist, either from the County's list of archaeological consultants or by a member of the Register of Professional Archaeologists who is familiar with California Central Coast archaeology. The project applicant or project proponent shall also be responsible for paying for the costs of data recovery and curation of recovered materials, if applicable.

**MM-CUL-CONS-6: Archaeological and Tribal Cultural Resources Protection.** Applicants for developments streamlining under the Consistency Process shall be required to submit an archaeological resource assessment as part of the development application for review by the County when a project has the potential to affect archaeological or Tribal Cultural Resources.

Refer to MM-CUL-OBJ-5 above for all standards and requirements for MM-CUL-CONS-6.

**MM-CUL-OBJ-7: Avoidance, Preservation, and Data Recovery.** To comply with all relevant site-specific County regulations and policies, if unique archaeological resources or Tribal Cultural Resources are identified, avoidance, preservation, and/or data recovery measures shall be implemented as outlined below.

1. Impacts to unique archaeological resources and Tribal Cultural Resources shall be avoided to the extent feasible. In all cases where unique archaeological resources or Tribal Cultural Resources are identified, the following avoidance measures shall be considered:
    a. Avoidance and preservation of the resources in place, including but not limited to, revising the project design or location to protect the resources and their natural context (e.g., through use of green spaces, parks, or other open space to incorporate the resources) with culturally appropriate protection and management criteria;
    b. Placing the area in a permanent conservation easement or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places;
    c. Limitation of public access; and
    d. Other feasible methods of avoidance and protection of the resource.
2. Mitigation based on a Data Recovery Plan (Phase III Plan) is allowed only upon demonstration by the project applicant or project proponent, based on substantial evidence, that avoidance is not feasible. Prior to the Data Recovery Plan being accepted as complete by the County Director of Housing and Community Development, evidence shall be submitted demonstrating that avoidance is not feasible.

3. The results of all data recovery activities shall be compiled into a final report. The final report shall be prepared by a qualified archaeologist and submitted to the County Director of Housing and Community Development for review and approval prior to final grading or building inspections.

**MM-CUL-CONS-8: Avoidance, Preservation, and Data Recovery.** Applicants for developments streamlining under the Consistency Process shall be required to implement avoidance, preservation, and/or data recovery measures if unique archaeological resources or Tribal Cultural Resources are identified.

Refer to MM-CUL-OBJ-7 above for all standards and requirements for MM-CUL-CONS-8.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.5.5.3 Threshold 3: Human Remains

**Threshold 3:** Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

### Impact Analysis

Based on the records search and research prepared for the CRTR, human remains were not identified in the project area. However, there is the potential for uncovering human remains during future development activities under the project. CEQA assigns special importance to human remains and establishes procedures to be used when Native American remains are discovered. CEQA Guidelines, Section 15064.5(e), lists steps to be followed in the event of the uncovering or recognition of any human remains in any location other than a dedicated cemetery. These steps include the following:

- There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
  - The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
  - If the coroner determines the remains to be Native American:
    - The coroner shall contact the Native American Heritage Commission within 24 hours.
    - The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendants of the deceased Native American.

- The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in California Public Resources Code section 5097.98.

These requirements are part of existing regulatory requirements and outlined in California Health and Safety Code, Section 7050.5, PRC Section 5097.98, and CEQA Guidelines, Section 15064.5. Therefore, although ground disturbance associated with the implementation of the project could have the potential to disturb or destroy Native American human remains, including those interred outside formal cemeteries, the required compliance with state law would reduce the potential impacts to a less than significant level.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.5.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to cultural resources that could result from implementation of the project. Considering the site-specific nature of the cultural resources analysis, the cumulative project study area was defined in a local context and includes the surrounding areas of each opportunity site, which are in the UMC, except Opportunity Site 53, which is in the City of Marina.

### 4.5.6.1 Cumulative Thresholds 1 and 2: Historical Resources and Archaeological Resources

As discussed in Sections 4.5.5.1 and 4.5.5.2, both known and unknown historical and archaeological resources are present in and around the project area. Future development in the UMC could affect as-yet undiscovered resources. However, similar to the proposed project, cumulative developments would be required to assess and mitigate potential impacts in accordance with applicable federal, state, and local regulations. Specifically, projects in UMC must comply with the 2010 General Plan Conservation and Open Space Element Goal OS-6 and Policies OS-6.1 through OS-6.6, North County Area Plan Policy NC-3.6, Carmel Valley Maste Plan Policy CV-3.13, North County Land Use Plan Section 2.9, Carmel Area Land Use Plan Section 2.9, and

County Code, Section 21.66.050, Standards for Archaeological and Tribal Cultural Resources Protection, and conduct site-specific reviews of structures over 50 years old during the planning process. With implementation of appropriate mitigation by qualified professionals, the project's contribution to cumulative impacts on historical and archaeological resources would be reduced to a less than significant level. Therefore, the project's contribution to cumulative impacts on historical and archaeological resources would not be cumulatively considerable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, MM-CUL-CONS-4, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.5.6.2 Cumulative Threshold 3: Human Remains

As with the project, cumulative development projects in UMC have the potential for uncovering unidentified human remains during future development activities. However, compliance with Health and Safety Code, Section 7050.5, and PRC Section 5097.98 would ensure that impacts related to disturbance of human remains are reduced to a less than significant level. Therefore, impacts to human remains would be individually and cumulatively less than significant without mitigation.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.5.7 Conclusion

Implementation of MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, MM-CUL-CONS-4, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would reduce potential impacts pertaining to cultural resources to a less than significant level.

# 4.6 Energy

This section evaluates the potential for impacts related to energy resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.6.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address energy.

#### 4.6.1.1 Federal

### Energy Policy and Conservation Act (Public Law 94-163)

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2010, fuel economy standards were set at 27.5 miles per gallon for new passenger cars and 23.5 miles per gallon for new light-duty trucks. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) were not subject to fuel economy standards in 2010. Passenger cars and light trucks used directly or indirectly associated with a project would be required to comply with the applicable fuel economy standards. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

The standards have been modified several times to cover additional model years, incorporating increasingly stringent standards over time. Standards for model years 2027–2031 were finalized in 2024. In this final rule, fuel economy is estimated to increase 2 percent per year for model years 2027–2031 for passenger cars, while light trucks will increase 2 percent per year for model years 2029–2031. These increases will bring the average light-duty vehicle fuel economy up to approximately 50.4 mpg by model year 2031 (NHTSA 2025a). Most recently, in 2025, the National Highway Traffic Safety Administration (NHTSA) issued a Notice of Proposed Rulemaking that would eliminate the inter-manufacturer credit trading system and amend standards to an industry fleetwide average for all light-duty vehicles of roughly 34.5 mpg in model year 2031 (NHTSA 2025b).

### Energy Independence and Security Act (Public Law 110-140)

The Energy Independence and Security Act of 2007 sought to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels, improving vehicle fuel economy and the efficiency of products, buildings, and vehicles. It also sought to improve the energy performance of the federal government. The Act set increased Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, appliance energy efficiency standards, Building Energy Efficiency Standards, and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2021).

#### 4.6.1.2 State

### Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. CEC regulates privately owned utilities in the energy, rail, telecommunications, and water sectors.

### State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan. The plan is intended to provide a comprehensive clean energy strategy for California's buildings. The plan identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 2025 Draft California Building Energy Action Plan. The plan focuses on efficient electrification of existing buildings as the primary pathway to greenhouse gas (GHG) reduction, and identifies electric heat pumps as the primary technological pathway.

### Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (California Public Resources Code, Section 25301(a)). This work culminated in the Integrated Energy Policy Report.

CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The 2023 Integrated Energy Policy Report is the most recent. The 2023 Integrated Energy Policy Report provides a summary of priority energy issues currently facing the state and outlines strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. The report contains an assessment of major energy trends and issues in California's electricity, natural gas, and transportation fuel sectors. The report provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. Topics covered in the 2023 Integrated Energy Policy Report include building decarbonization, coordination between state energy agencies, decarbonizing the state's natural gas system, increasing transportation efficiencies, improving energy reliability, and an assessment of the California Energy Demand Forecast (CEC 2023).

### Executive Order N-79-20

Executive Order (EO) N-79-20 requires that by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles (ZEV). Under the Order, California Air Resources Board (CARB) must propose strategies to achieve 100 percent zero emissions from medium- and heavy-duty on-road vehicles in California by 2045, where feasible, and by 2035 from drayage trucks. Final details for achieving the goal are not available, but CARB has several existing programs to encourage ZEV adoption. These include the Carl Moyer Program, which provides incentives to replace existing vehicles and equipment with the cleanest available technology, and the Low Carbon Transportation Program, which focuses on advancing technologies through zero-emissions demonstration projects and supports the deployment of on-road zero-emissions technologies. The Advanced Clean Cars II (ACC II) Program, discussed below, provides the regulatory framework for meeting the sales requirement set forth in EO N-79-20. The U.S. Environmental Protection Agency (USEPA) granted CARB its California Clean Air Act (CAA) waiver request on December 18, 2024. However, Public Law 119-16 rescinded California's waiver under the CAA in 2025. The State of California is currently challenging the authority of Congress to revoke the waiver, and it is currently unknown whether the ACC II program will remain in place.

## Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars Program, which combined the control of GHG emissions and criteria air pollutants and requirements for more ZEVs into a single package of regulatory standards for vehicle model years 2017–2025. The new regulations strengthened the GHG standards for 2017 models and beyond. In addition, the program's ZEV regulation required battery, fuel cell, and plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the Advanced Clean Cars II program, which set sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales statewide by 2035. As noted above, the impacts of Public Law No. 119-16 are uncertain pending the outcome of litigation challenging the rescission.

## State Alternative Fuels Plan

The State Alternative Fuels Plan, required by Assembly Bill (AB) 1007 and adopted in December 2007, outlines a plan to increase the use of alternative fuels in California (California Health and Safety Code, Section 43866). The Plan was prepared by the CEC with the California Air Resources Board and in consultation with other federal, state, and local agencies to reduce petroleum consumption, increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen), reduce GHG emissions, and increase in-state production of biofuels. The Plan recommended a strategy that combined private capital investment, financial incentives, and advanced technology to increase the use of alternative fuels, significantly improve in the energy efficiency of vehicles, and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implemented this plan.

## Renewables Portfolio Standard

### *Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08*

The California Renewables Portfolio Standard (RPS) program was established in 2002 under SB 1078 (Sher) and 107 (Simitian). The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the amount of electricity supplied from renewable energy resources to 33 percent of total procurement by 2020. Initially under the RPS, certain retail sellers of electricity were required to increase the proportion of renewable energy in their energy portfolio by at least 1 percent each year to reach at least 20 percent by December 30, 2010. EO S-14-08 was signed in November 2008. It expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the state. Based on the 2025 RPS Annual Report, all electricity retail sellers had an annual target to serve at least 44 percent of their electric load with

RPS eligible resources by December 31, 2024. In general, most retail sellers either met or exceeded the 44 percent interim RPS target, and many are on track to achieve their 2021–2024 compliance period requirements (CPUC 2025).

#### *Clean Energy and Pollution Reduction Act*

The Clean Energy and Pollution Reduction Act (SB 350) was signed into law in September 2015. SB 350 established tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures. This act made the following changes to California codes:

- **California Health and Safety Code:** Amended Section 43013
- **California Public Resources Code:** Amended Sections 25000.5 and 25943
- **California Public Utilities Code:** Amended Sections 399.11, 399.12, 399.13, 399.15, 399.16, 399.18, 399.21, and 399.30; added Section 454.51; and added Article 17 (beginning with Section 400) to Chapter 2.3, Part 1, Division 1

#### *Senate Bill 100: California Renewables Portfolio Standard Program – Emissions of Greenhouse Gases*

On September 10, 2018, Governor Jerry Brown signed Senate Bill (SB) 100, which replaced the SB 350 requirement of 45 percent renewable energy by 2027 with the requirement of 50 percent by 2026 and raised California's RPS requirements for 2050 from 50 to 60 percent. SB 100 also established RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Furthermore, the law established an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end users and 100 percent of electricity procured to serve state agencies by December 31, 2045. Under the law, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target. The act amended Sections 399.11, 399.15, and 399.30 of the Public Utilities Code, and added Section 454.53 relating to energy.

### Climate Change Scoping Plan

CARB adopted the first Climate Change Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan included GHG emissions reduction strategies related to energy efficiency, as well as water use, recycling and solid waste, and other recommendations. The most recent update to the Scoping Plan was adopted by CARB in December 2022.

### Building Energy Efficiency Standards (California Code of Regulations, Title 24, Part 6)

The Building Energy Efficiency Standards (referred to as the California Energy Code) (Title 24 of the California Code of Regulations) were established in 1978 to regulate building design to reduce

wasteful energy consumption. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established the Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The CEC is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy-efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need for new power plants, and help preserve the environment.

The latest update to the Title 24 Standards went into effect on January 1, 2026 (the 2025 Standards). The 2025 Standards emphasize the use of heat pumps for space heating and water heating, as well as photovoltaic and battery storage systems. The standards also strengthen ventilation standards to improve indoor air quality.

### California Green Building Standards Code (California Code of Regulations, Title 24, Part 11)

The California Green Building Standards Code (24 CCR Part 11), also known as CALGreen, contains mandatory requirements for new residential and non-residential buildings throughout California. The current 2025 Standards for new construction of and additions and alterations to residential and non-residential buildings went into effect on January 1, 2026.

The California Green Building Standards Code is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the Governor's directives. The Code was established to reduce construction waste, increase the efficiency of the materials and energy used by buildings, and reduce environmental impacts during and after construction.

### Executive Order S-06-06: Biofuel and Biopower Production Targets

EO S-06-06, signed on April 25, 2006, by Governor Schwarzenegger, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: a minimum of 20 percent of the state biofuel use to be produced in California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the state to meet a target of 20 percent of renewable energy generation being provided from biomass electricity. The 2011 Bioenergy Action Plan both identified these barriers and recommended actions to address them so the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updated the 2011 Plan, providing a more detailed action plan to achieve the following goals (BIWG 2012):

- Increase environmentally and economically sustainable energy production from organic waste;
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- Create jobs and stimulate economic development, especially in rural regions of the state; and
- Reduce fire danger, improve air and water quality, and reduce waste.

As of 2024, 1.9 percent of the total electricity system power in California was derived from biomass.

#### *Assembly Bill 130/Senate Bill 131*

AB 130 and SB 131, signed by Governor Newsom in June 2025, are intended to streamline California Environmental Quality Act (CEQA) review of new housing development. AB 130 and SB 131 expanded CEQA exemptions for qualifying housing projects, specifically new infill development. AB 130 limited local jurisdictions' ability to update building codes to apply more restrictive standards to housing development, including green building standards. These bills took effect on July 1, 2025. The AB 130 limitation on building code updates is effective from October 1, 2025, through June 1, 2031.

### 4.6.1.3 Local

### 2010 General Plan (Inland)

#### *Conservation and Open Space Element*

Goal OS-9 and Policies OS-9.1 through OS-9.8 of the Monterey County General Plan (2010 General Plan) promote efficient energy use. For instance, Policy OS-9.1 encourages the use of solar, wind, and other renewable energy resources. Policies OS-9.1 through OS-9.5 encourage clustering development and directing development toward cities, Community Areas, and Rural Centers where energy expended can be concentrated and minimized. Additionally, Policy OS-9.6 requires that development incorporate features that reduce energy used for transportation, such as pedestrian and bicycle pathways, access to transit, and roadway design as appropriate. Policy OS-10.10 requires consideration of several sustainable land use strategies in the design of future development in Community Areas and Rural Centers to reduce energy consumption, minimize GHG emissions, and foster healthier environments. Strategies related to energy include maximizing energy efficiency to the extent feasible and accommodating energy infrastructure (i.e., transmission lines, power plants and pipelines, and fueling stations), including the potential for distributed renewable generation.

## Area and Master Plans

### *Central Salinas Area Plan*

Policy CSV-3.2 encourages the development and utilization of renewable energy sources such as solar, wind generation, and biomass technologies in the Central Salinas Valley.

## 1982 General Plan (Coastal)

Goal 13 and objectives and policies thereunder are intended to promote efficient energy use. For instance, Policies 12.3.1 and 13.3.2 encourage clustering of development near existing urban areas where energy expended for transportation and provision of services can be minimized and conserved. Policies 13.3.1 through 13.4.3 encourage energy efficiency for new buildings and retrofitting for existing buildings. Goal 14 and objectives and policies thereunder encourage the development of renewable energy resources. Specifically, Objective 14.2 encourages the use of solar and other renewable resources where appropriate for building applications, and Policy 14.2.1 requires solar heating as the primary source for heat in all new swimming pools where proven cost effective.

## Monterey County Code

### *Chapter 16.63 – Standards for Landscaping*

This chapter establishes landscape standards that minimize water use, eliminate water waste, and maximize energy efficiency by requiring low water landscape plantings, irrigation methods, and low energy lighting and ornamental landscape features in all of UMC. Section 16.63.130 requires energy use and conservation measures in landscape projects, including energy-efficient landscape lighting that uses ENERGY STAR-qualified hard-wired fixtures with controls that automatically switch off in the daylight or solar-powered lighting systems.

### *Chapter 18.06 – Energy Code*

Section 18.06.010 of the Monterey County Code (County Code) adopts the 2022 California Energy Code, California Code of Regulations, Title 24, Part 6, as the Energy Code for Monterey County.

### *Chapter 18.11 – Green Building Standards*

Section 18.11.010 of the County Code adopts the 2022 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11, also known as CALGreen, as the Green Building Standards Code for Monterey County. Section 18.11.040, Renewable Energy Generation Requirements, requires all new or non-residential rebuild structures greater than 25,000 square feet to provide on-site renewable energy generation that produces a minimum of 15 percent of their projected energy demand.

#### *Chapter 18.17 – Expedited Permitting Process for Small Residential Rooftop Solar Energy Systems*

This chapter of the County Code adopts an expedited, streamlined permitting process to achieve timely and cost-effective installations of small residential rooftop solar energy systems.

#### *Section 19.10.080 – Energy Conservation*

This section of the County Code requires the design of a subdivision to provide, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision.

### Monterey County Community Climate Action and Adaptation Plan

The County is currently preparing a Community Climate Action and Adaptation Plan (CCAAP). A draft of the CCAAP was released to the public in April 2026 (County of Monterey 2026). The CCAAP is an effort to reduce greenhouse gas emissions in line with the targets set by the State of California through 2045. The CCAAP includes targets to reduce community GHG emissions by 28 percent below 2019 emissions by 2030, 66 percent below 2019 emissions by 2040, and 86 percent below 2019 emissions by 2045. Strategies to reduce GHG emissions include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation, including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. The CCAAP also includes actions for protecting natural and working lands, including urban forests and green spaces in developed lands. The strategies described in the CCAAP provide the County with a viable pathway to meet its climate goals of 28 percent reduction in 2030 and 66 percent reduction in 2040. The CCAAP provides progress toward but does not project achievement of the 2045 goal. The largest source of emissions in 2045 is anticipated to come from agricultural operations, primarily associated with grazing livestock, which is identified as providing value and benefits to the community that makes operational change to reduce emissions difficult. The County will continue to seek opportunities to maintain carbon held in natural and working lands to meet its long-term 2045 GHG reduction target.

## 4.6.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to energy.

### Electricity

Monterey County is in the service area for Central Coast Community Energy (3CE), which currently provides at least 56 percent of electricity from renewable resources. 3CE aims to provide customers with 100 percent renewable energy to 2030. Before then, customers can opt into "3CE Prime," which provides 100 percent of electricity from renewable resources (3CE 2026). Total electricity consumption in Monterey County was 2,463 gigawatt-hours in 2024 (CEC 2026a).

### Natural Gas

Pacific Gas & Electric (PG&E) provides gas service in Monterey County. PG&E service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east (PG&E 2026). Total natural gas consumption in Monterey County was 98.89 million therms for 2024 (CEC 2026b).

## 4.6.3 Method of Analysis

Annual construction energy consumption is estimated based on the assumptions outlined in Section 4.3, Air Quality, for consistency with the criterial pollutant modeling. For instance, fuel use is estimated based on the results of California Emissions Estimator Model (CalEEMod) modeling (Appendix F, Air Quality Technical Analysis) and per-gallon conversion factors from the USEPA (2025) for motor gasoline and diesel fuel. Although alternatively fueled construction equipment may be used for future construction projects, CalEEMod default construction assumptions are conservatively assumed for all future construction processed under the HEU6, including the use of a diesel construction equipment fleet. Consistent with CalEEMod default assumptions, no electricity or natural gas use was assumed during construction.

Operational natural gas use for future development was also estimated using the CalEEMod assumptions described in Section 4.3. Fuel use from vehicles typically accounts for a large portion of energy consumption. Future fuel use is estimated based on the net change in vehicle miles traveled (VMT) attributable to the project (Appendix L, VMT Memorandum), and average fuel use per VMT for passenger vehicles from EMFAC2025 (v2.1.0). As such, energy modeling includes evaluation of the theoretical maximum development capacity of 12,497 units, consistent with the assumptions of the VMT analysis in Section 4.16, Transportation. However, as described in Chapter 3, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in the UMC.

Total fuel and energy consumption is averaged by the number of buildout residences (12,479 units). Fuel use calculations are provided in Appendix I, Fuel Use Worksheet.

## 4.6.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on energy if it would:

- **Threshold 1:** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- **Threshold 2:** Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

## 4.6.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to energy that could result from implementation of the project.

### 4.6.5.1 Threshold 1: Wasteful or Inefficient Energy Usage

**Threshold 1:** Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

### Impact Analysis

The following sections address various potential impacts relating to energy that could result from implementation of the HEU6.

#### *Construction*

Construction of future residences would require temporary increases in energy demand. Construction energy impacts involve the one-time, non-recoverable energy costs associated with the construction of structures and supporting features, such as parking lots and new infrastructure. During construction, an increase in energy consumption would occur through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for lighting and other sources. Individual construction projects may require demolition, site preparation, grading, utility installation, building construction, paving, and architectural coatings. It is assumed that construction would be typical for the region because sites identified for potential development lack unique features, such as remote location, that would result in unusual energy use.

Total diesel fuel use and motor gasoline consumption from the operation of construction equipment, haul truck trips, vendor truck trips, and worker vehicle trips for total capacity buildout are summarized in Table 4.6-1, Theoretical Maximum Buildout Capacity Construction Diesel Fuel and Gasoline Use. The total use estimates are based on the conservative theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites. The total averaged over 12,497 units is also provided for informational purposes. Although the impact analysis is based on the highly unlikely theoretical maximum total capacity of 12,497 housing units, the more reasonable scenario is the development of up to 4,434 housing units. As noted earlier, development of 12,497 housing units is neither supported by historical building trends nor aligned with market demand in the UMC. Regardless, it has been provided to fully disclose the potential environmental consequences associated with the highest intensity of development legally permitted under the proposed zoning for impacts.

**Table 4.6-1. Theoretical Maximum Buildout Capacity Construction Diesel Fuel and Gasoline Use**

| Fuel Type | Total Amount | Average Per Residence |
|---|---|---|
| Diesel Fuel | 4,036,287 gallons | 323 gallons |
| Motor Gasoline | 7,869,585 gallons | 631 gallons |

**Sources:** Refer to CalEEMod output (Appendix F) and fuel use calculations (Appendix I); USEPA 2025 (conversion factors).

**Notes:** Includes fuel use from construction equipment, haul truck trips, vendor truck trips, and worker vehicle trips. Assumes a conversion factor of 10.21 kg/$CO_2$ for diesel fuel and 8.78 kg/$CO_2$ for motor gasoline. Detailed calculations are provided in Appendix I.

To limit wasteful and unnecessary energy consumption, future construction contractors would be required to minimize nonessential idling of construction equipment in accordance with California Code of Regulations, Title 13, Article 4.8, Chapter 9, Section 2449. In addition, electricity may be available on individual construction sites through existing power lines and connections, which could minimize or avoid the use of less-efficient diesel generators. Furthermore, construction-related trips would avoid unnecessary energy use because the sites identified in HEU6 are served by the established roadway network. Additionally, construction is necessary to meet the County's state-required Regional Housing Needs Assessment. Overall, construction activities associated with residential developments accommodated under the HEU6 would not result in energy use that is inefficient, wasteful, or unnecessary compared to similar development projects. Therefore, construction-related energy impacts would be less than significant.

### *Operation*

Table 4.6-2, Theoretical Maximum Buildout Capacity Energy Use, provides energy use estimates for electricity, natural gas, and vehicle fuel (fossil fuels) from implementation of residential development accommodated under the HEU6. The total use estimates are based on the highly unlikely theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites, consistent with the assumptions of the VMT analysis in Section 4.16. Total annual consumption averaged over 12,497 units is also provided for informational purposes.

**Table 4.6-2. Theoretical Maximum Buildout Capacity Energy Use**

| Energy Type | Total Annual Usage | Annual Usage per Unit |
|---|---|---|
| Electricity (kWH/year) | 44,269,700 | 3,548 |
| Natural Gas (kBTU/year) | 502,760,556 | 40,289 |
| Vehicle Fuel Use (gallons/year) | 3,727,011 | 299 |

**Source:** Refer to CalEEMod output and fuel use calculations in Appendix F and I.

**Notes:** kWh/yr = kilowatt-hour per year; KBTU/yr = kilo British thermal unit per year; Assumes a conversion factor of 8.78 kg/$CO_2$ for motor gasoline. Detailed calculations are provided in Appendix I.

Electrical service to the UMC area would continue to be provided by 3CE through connections to existing off-site electrical lines and new on-site infrastructure. Natural gas would continue to be provided through PG&E. As shown in Table 4.6-2, electricity, natural gas, and fuel use would increase under HEU6 implementation. However, future development would be required to comply

with the applicable Title 24, Building Energy Efficiency Standards and CALGreen. As the most recent Title 24 Standards are not yet reflected in CalEEMod default assumptions, it is anticipated that development would result in less energy consumption than reported in Table 4.6-2. Because new construction would continue to be required to comply with applicable energy efficiency regulations, development would not result in wasteful, inefficient, or unnecessary electricity and natural gas demands.

As noted in Section 4.6.1, Regulatory Setting, California emissions standards are currently being challenged at the federal level. The outcome of these challenges may result in less stringent future emissions standards than currently anticipated at the California level, as reflected in Table 4.6-2. If California's standards remain, fuel use would be reduced compared to Table 4.6-2. As noted in Chapter 3, site selection for housing opportunities included consideration of proximity to jobs, transit services, and schools. This is outlined in more detail in Section 4.8, Greenhouse Gas Emissions. The proposed HEU6 would accommodate additional housing adjacent to existing housing development, and would amend various County planning documents (e.g., 2010 General Plan, Local Coastal Program Land Use Plans, and Zoning Ordinance) to facilitate the development of higher-density residential development. The County would also continue to implement existing 2010 General Plan policies to expand access to transit (Circulation Element Policy C-1.6) and provide additional bike lanes (Circulation Element Policy C-2.6). The County's site selection process and existing 2010 General Plan goals allow for more development in areas close to existing development and infrastructure to increase walkability and use of transit.

The County's site selection process and future expansion of alternative transportation facilities would reduce future fuel demand. However, an increase in fuel use would occur related to future residential development. The increase in fuel use is associated with planned residential growth to achieve the state-required Regional Housing Needs Assessment and to meet existing and projected housing needs in the UMC. As stated above for the construction analysis, a more reasonable scenario is development of up to 4,434 housing units. However, this section evaluates development of 12,497 housing units to be consistent with the assumptions of the VMT analysis in Section 4.16, although not supported by historical building trends nor aligned with market demand in the UMC. Although operation-related fuel usage associated with the residential developments identified in HEU6 would increase, it would not be any more inefficient, wasteful, or unnecessary than similar development projects, and is necessary to accommodate planned growth. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

### Summary

As demonstrated above, the HEU6 would result in an increase in electricity, natural gas, and fossil fuel use during construction and operation. However, energy use from implementation of the HEU6 would not result in wasteful, inefficient, or unnecessary consumption of energy. Development under the HEU6 would comply with applicable federal, state, and local regulations

during construction and operation. The project does not include any components that would encourage or enable wasteful, inefficient, or unnecessary resource consumption. Potential impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.6.5.2 Threshold 2: Conflict with Renewable or Energy Efficiency Plan

**Threshold 2:** Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

### Impact Analysis

The County has not adopted a Renewable or Energy Efficiency Plan. As discussed in Section 4.6.1, the County is currently preparing a CCAAP in an effort to reduce greenhouse gas (GHG) emissions. Strategies to reduce GHG emissions are anticipated to include buildings and energy, and transportation and related fuel use. However, this Plan is not yet adopted. As such, the following evaluates consistency of the HEU6 with California energy programs.

The State of California has established electricity goals for transitioning to renewable energy under its RPS program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The RPS goals have been updated since the adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 44 percent by 2024, 50 by 2026, 52 percent by 2027, 60 percent by 2030, and 100 percent by 2045. The RPS requirements apply to utility providers rather than individual development projects. However, the residential development identified in the HEU6 that requires service from 3CE would comply with the current and future iterations of the Building Energy Efficiency Standards and CALGreen, including residential requirements for solar photovoltaic systems. Development accommodated by the project would not result in wasteful, inefficient, or unnecessary electricity use. Therefore, implementation of the HEU6 would not obstruct the ability of 3CE to achieve California's RPS program targets, and impacts related to California electricity goals would be less than significant.

Transitioning away from the use of natural gas is a statewide goal aimed at achieving emissions reduction targets (refer to Section 4.8). As discussed in Section 4.8, recent California action (AB 130) has limited local jurisdiction's ability to limit new development's natural gas use. The County is currently exploring options to mandate electrification through CCAAP implementation. As noted above, the CCAAP is not yet adopted. Future development would be required to comply with any applicable future regulations adopted as part of CCAAP implementation. Regardless, new development under the HEU6 would be required to comply with Title 24 Building Energy Efficiency Standards and CALGreen, which include increasingly stringent requirements to reduce natural gas use. For example, the 2025 Standards both increase residential requirements to be electric appliance-ready and require heat pumps in single-family homes for heating. Future development would comply with applicable building standards. Consequently, impacts related to California natural gas goals would be less than significant.

Regarding fuel use, the State Energy Plan calls for California to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental impacts and energy costs. Additionally, the County has adopted the Zero Emissions Shared Mobility Study to identify innovative, accessible, and sustainable transportation options, especially for residents in low-income, rural, and historically underserved communities. This effort aims to address transportation gaps by exploring shared mobility solutions, such as bike sharing, ridesharing, car or van pooling, among others, that are reliable, affordable, and non-polluting. Although these plans do not include project-level mandates or requirements, State of California efforts combined with County implementation of the Study's recommendations would reduce overall state and regional fuel usage. The HEU6 does not control either state and federal fuel standards or the transportation choices of future residents. However, the vehicles associated with growth under the HEU6 would be required to comply with applicable federal and state fuel efficiency standards. Additionally, the HEU6 is intended to accommodate needed housing to achieve state-mandated housing targets. It neither induces growth nor proposes specific development that would result in wasteful, inefficient, or unnecessary resource consumption. Therefore, potential impacts related to fuel use goals would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.6.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to energy that could result from implementation of the project.

### 4.6.6.1 Cumulative Threshold 1: Wasteful or Inefficient Energy Usage

Construction and operation of future projects under the HEU6 would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, development would be accommodated in areas currently served by 3CE and PG&E. The project does not include components that would encourage or enable inefficient uses of energy. Cumulative development in the 3CE and PG&E service areas would similarly be required to comply with applicable standards, including the Title 24 Building Energy Efficiency Standards and CALGreen, which would ensure that cumulative development does not result in the wasteful, inefficient, or unnecessary consumption of energy. As such, due to existing regulatory processes, the HEU6 and cumulative projects would not result in cumulatively considerable environmental impact due to wasteful, inefficient, or unnecessary consumption of energy. Thus, potential impacts would be less than cumulatively considerable.

#### Significance of Impact

Less than significant impact.

#### Mitigation Measures

No mitigation measures are required.

#### Significance of Impact After Mitigation

Less than significant impact.

### 4.6.6.2 Cumulative Threshold 2: Conflict with Renewable or Energy Efficiency Plan

The HEU6 would not conflict with any adopted California or local plans for renewable energy or energy efficiency. Cumulative developments would also be required to be consistent with applicable regulations adopted to support California-wide energy goals, such as Title 24 Energy Efficiency Standards. Because it can be assumed that other cumulative projects would implement features to reduce inefficient or unnecessary energy use, the HEU6 and cumulative projects would not conflict with California's Energy Conservation Plans. As such, potential impacts due to a conflict with or obstruction of a California or local plan for renewable energy or energy efficiency would be less than cumulatively considerable.

#### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.6.7 Conclusion

Implementation of the project would result in less than significant impacts pertaining to energy.

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# 4.7 Geology and Soils (Paleontological Resources)

This section evaluates the potential for impacts related to geological resources resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts to the paleontological resources, particularly from ground disturbance associated with construction activities from buildout of the project. All other issues pertaining to geology and soils (e.g., seismic-related hazards, landslides, soil erosion and topsoil loss, soil stability, expansive soils, support for septic tanks or alternative wastewater disposal systems) were determined to be less than significant with implementation of the project and are evaluated in Section 7.1, Geology and Soils, of Chapter 7, Effects Found Not to Be Significant.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.7.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address paleontological resources. All other issues pertaining to geology and soils are evaluated in Section 7.1.

### 4.7.1.1 Federal

#### Antiquities Act (16 USC 431–433)

The Antiquities Act of 1906 states, in part, the following:

> That any person who shall appropriate, excavate, injure or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary

> of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

Although there is no specific mention of natural or paleontological resources in the act itself or in the act's uniform rules and regulations (43 CFR 3), the term "objects of antiquity" has been interpreted to include fossils by the National Park Service, Bureau of Land Management, U.S. Forest Service, and other federal agencies. Permits to collect fossils on lands administered by federal agencies are authorized under this act. However, due to the large gray areas left open to interpretation due to the imprecision of the wording, agencies are hesitant to interpret this act as governing paleontological resources.

#### Paleontological Resources Preservation, Omnibus Public Lands Act, Public Law 111-011, Title VI, Subtitle D

This legislation directs the Secretaries of the U.S. Department of the Interior and U.S. Department of Agriculture to manage and protect paleontological resources on federal land using "scientific principles and expertise." To formulate a consistent paleontological resources management framework, the act incorporates most of the recommendations from the Secretary of the Interior's report Assessment of Fossil Management on Federal and Indian Lands (USDI 2000). In passing the act, Congress officially recognized the scientific importance of paleontological resources on some federal lands by declaring that fossils from these lands are federal property that must be preserved and protected. The act codifies existing policies of the Bureau of Land Management, National Park Service, U.S. Forest Service, Bureau of Reclamation, and U.S. Fish and Wildlife Service and provides the following:

- Uniform criminal and civil penalties for illegal sale and transport and theft and vandalism of fossils from federal lands
- Uniform minimum requirements for paleontological resource-use permit issuance (terms, conditions, and qualifications of applicants)
- Uniform definitions for "paleontological resources" and "casual collecting"
- Uniform requirements for curation of federal fossils in approved repositories

### 4.7.1.2 State

#### California Public Resources Code, Section 30244

California Public Resources Code (PRC), Section 30244, states that reasonable mitigation measures shall be required where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer.

### California Public Resources Code, Section 5097

Paleontological resources are recognized as non-renewable resources and receive protection under the PRC and California Environmental Quality Act (CEQA). PRC Sections 5097 through 5097.6, particularly Section 5097.5, are the primary statutes protecting paleontological resources on public lands.

PRC Section 5097.2 calls for site surveys on state lands proposed for construction projects to determine the presence of historic or prehistoric resources, including paleontological sites or features, as well as recommendations concerning the preservation, photographing, recording, or excavation for any resources that may occur on the lands.

PRC Section 5097.3 calls for surveys on state lands proposed for construction projects to preserve or record any archaeological, paleontological, or historical features, which may be located on the lands, after receiving the recommendations of the department.

PRC Section 5097.5 states the following:

> A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands. . . . A violation of this section is a misdemeanor.

This statute prohibits the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. As a result, local agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, and district) lands.

#### 4.7.1.3 Local

### 2010 General Plan (Inland)

Adopted in 2010, the Monterey County General Plan (2010 General Plan) includes broad goals and policies aimed at conserving and identifying paleontological resources in Monterey County. Relevant goals and policies from the 2010 General Plan's Conservation and Open Space Element are included below.

### *Conservation and Open Space Element*

Goal OS-7 and Policies OS-7.1 through OS-7.5 encourage the conservation and identification of Monterey County's paleontological resources and designing or clustering development to avoid sensitive paleontological sites. Specifically, OS-7.1 requires developers to complete Phase I (reconnaissance-level) paleontological reviews in any formation known to yield important elements of the fossil record. If significant fossil deposits are found during grading activities, data recovery is required to obtain a sample of materials from such deposits prior to further ground disturbance. Further, development proposed in high and moderate sensitivity zones, known fossil-bearing formations, and low sensitivity zones where there is specific additional information indicating the presence of paleontological resources shall require a paleontological field inspection prior to approval (Policies OS-7.3 and OS-7.4).

## Monterey County Local Coastal Program – Land Use Plans

Applicable policies in the Local Coastal Program are summarized below. Refer to Section 4.5, Cultural Resources, for further discussion of these policies.

### *North County Land Use Plan (Coastal)*

Applicable policies from the North County Land Use Plan (LUP) include General Policies 2.9.2 and Specific Policies 2.9.3. General Policies 2.9.2 encourage the timely identification and evaluation of paleontological resources so they are considered during the conceptual design phase of land use planning or project development. Specific Policies 2.9.3 ensure environmental review and mitigation, as needed, for development on areas considered sensitive for paleontological resources and prohibit activities which could destroy or damage these resources. In particular, Policy 2.9.2.2 states that no development proposals in these areas shall be categorically exempt from environmental review.

### *Carmel Area Land Use Plan*

General Policies 2.8.3 and Specific Policies 2.8.4 of the Carmel Area LUP encourage the timely identification and evaluation of paleontological resources so they are considered during the conceptual design phase of land use planning or project development. Specific Policies 2.8.4 limit public access to or over known paleontological sites.

## Monterey County Code

### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.110 (Archaeological Resource Development Standards) provides development standards for the maintenance and protection of North County's archaeological resources. Development Standard 3 states:

> Where construction on or reconstruction impacts to an identified archaeological or paleontological site cannot be avoided, as verified in the archaeological report prepared for the project, a mitigation plan shall be required for the project. Prior to the application being considered complete, the plan shall be required by, submitted to, and approved by the County. The plan shall be prepared at the applicant's expense by a qualified archaeologist, either on the County's list of archaeological consultants or a member of the Society of Professional Archaeologists. Included in the plan shall be recommend preservation measures in accordance with the guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission. The consulting archaeologist shall file the report with the State Office of Historic Preservation. (Ref. Policy 2.9.3.2)

Carmel Area (Part 4) Section 20.146.090 (Archaeological Resource Development Standards) provides development standards to maintain and protect the scientific and cultural heritage values of areas considered to be archaeologically sensitive, including those not yet surveyed and mapped. Development Standard 4 states:

> Where construction on or construction impacts to an identified archaeological or paleontological site cannot be avoided, as verified in the archaeological report prepared for the project. This mitigation plan shall be required by, submitted to and approved by the County. The plan shall be prepared at the applicants' expense. Included in the plan shall be recommended preservation measures on accordance with the guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission. The Consulting Archaeologist shall file the report with the State Office of Historic Preservation (Ref. Policy 2.8.4.6).

Specific Development Standard E(2) states:

> Public access to or over known archaeological or paleontological sites shall be limited and concentrated in areas where supervision and interpretive facilities are available (Ref. Policy 2.8.4.8).

## 4.7.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to paleontological resources.

### 4.7.2.1 Paleontological Resources

According to the Paleontological Resources Preservation Act of 2009 (43 CFR 49), which protects paleontological resources on federal lands, paleontological resources are the fossilized remains, traces, or imprints of prehistoric plant and animal life preserved in or on Earth's crust, except:

1. Those that are found in an archaeological context and are an archaeological resource as defined in section 3(1) of the Archaeological Resources Protection Act of 1979 (16 U.S. Code [USC] 470bb(1)); or
2. "Cultural items," as defined in section 2 of the Native American Graves Protection and Repatriation Act (25 USC 3001); or
3. Resources determined in writing by the Federal land manager to lack paleontological interest or not provide information about the history of life on earth, based on scientific and other management considerations.

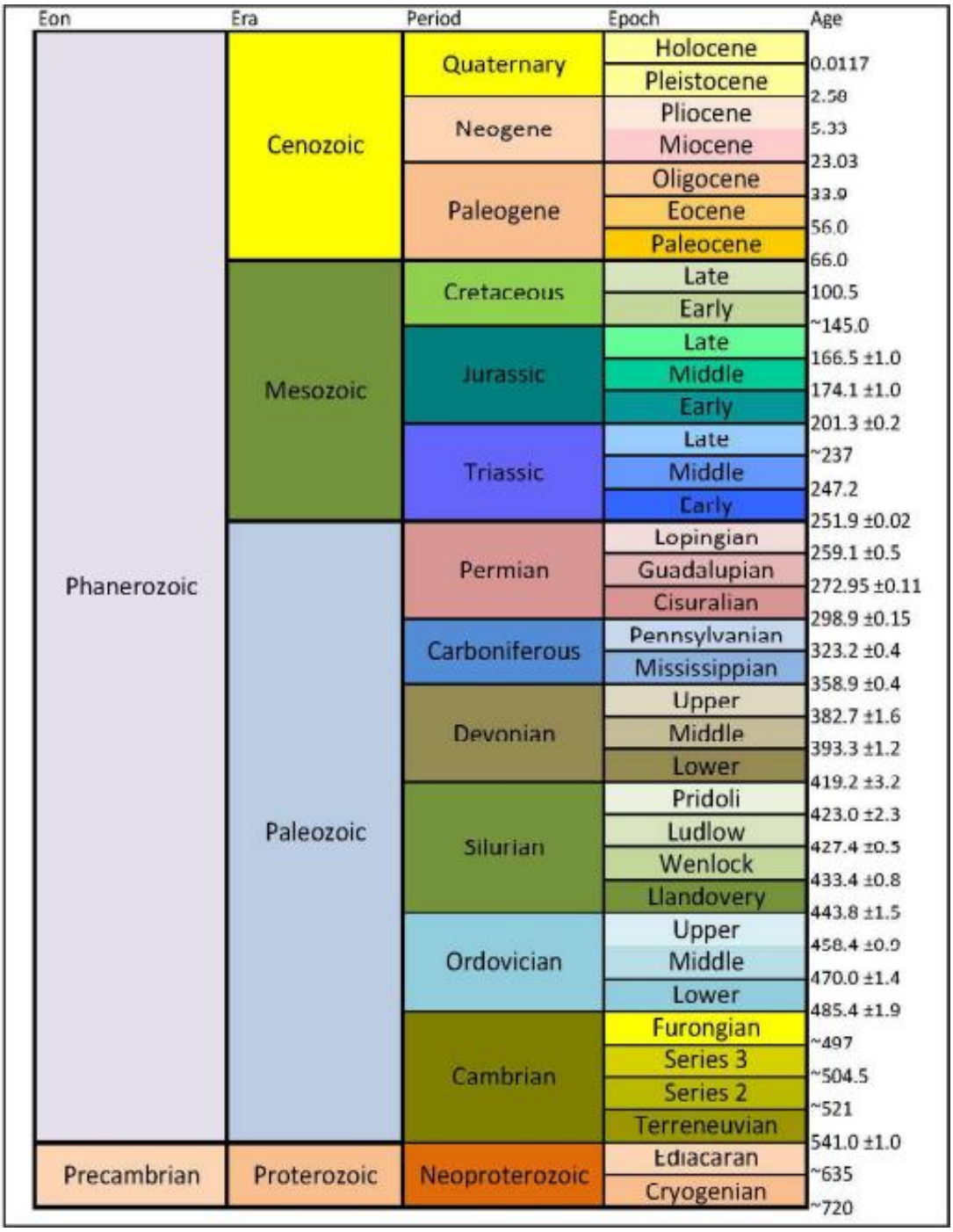
Fossil remains such as bones, teeth, shells, and wood are found in the geologic deposits (rock formations) in which they were originally buried. Paleontological resources represent a limited, non-renewable, sensitive scientific and educational resource. The potential for fossil remains at a location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are buried. Therefore, knowledge of the geology of a particular area and the paleontological resource sensitivity of particular rock formations, make it possible to predict where fossils will or will not be encountered.

#### 4.7.2.2 Paleontological Resources in Monterey County

According to the Final Environmental Impact Report for the Monterey County 2007 General Plan (ICF Jones & Stokes 2008), most of the fossils identified in Monterey County are of marine life forms. These fossils form a record of the region's geologic history of advancing and retreating sea levels. These deposits lack the large terrestrial fossils found in other regions due to their marine origin and are comprised mainly of micro-organisms, such as foraminifers or diatoms or assemblages of mollusks and barnacles most commonly found in sedimentary rocks ranging from Cretaceous age to Pleistocene age. As shown in Table 4.7-1, Geologic Time Scale, Cretaceous age ranges from approximately 145 million years ago to approximately 66 million years ago, and Pleistocene age is about 2.59 million years ago to 11,700 years ago.

According to the County's geographic information systems data, there are 12 sites in Monterey County that have been identified as having significant paleontological resources (County of Monterey 2023; refer to Figure 4.7-1, Paleontological Resources in Monterey County). The fossils at these 12 sites generally reflect the type of assemblages found throughout Monterey County (micro-organisms or invertebrates); however, they also possess special characteristics that make them unique or rare, or in some way provide important stratigraphic or historical information. Table 4.7-2, Paleontological Resources in Monterey County, lists the age and formation types of these 12 sites. Geologic age of these paleontological resources ranges from Late Cretaceous (100.5 million years ago) to Miocene (5.33 million years ago).

**Table 4.7-1. Geologic Time Scale**




**Source:** USGS 2022.

**Table 4.7-2. Paleontological Resources in Monterey County**

| Location | Formation | Epoch | Description |
|---|---|---|---|
| 1 | Carmelo Formation of Bowen | Early Eocene | Ichnofossil assemblage at Weston Beach, Point Lobos contains a unique well-preserved and diverse trace-fossil assemblage that represents a mixture of "shallow-water" and "deep-water" types |
| 2 | Monterey Formation | Late Miocene | Exceptionally well-preserved crabs occur with benthic foraminifers diagnostic of upper middle bathyal depths (500–1500 meters) |
| 3 | Canyon del Rey Diatomite Member of Formation of Bowen | Late Miocene (Mohnian) | Diatomite beds are correlative with beds of the type Delmontian Stage of Kleinpell (1938) containing foraminifers and diatoms of Mohnian age, indicating that the type Delmontian is actually Mohnian in age |
| 4 | Santa Margarita Sandstone | Late Miocene | Mollusks and the echinoid, Astrodapsis, occur about 500 feet stratigraphically above the top of the diatomite beds of the type Monterey Formation and bracket the upper age of the Monterey |
| 5 | Monterey Formation | Early Miocene | Monterey Formation along Reliz Creek yields benthic and planktic foraminifers and calcareous nannofossils that enable correlation of the upper part of the Relizian Stage in its type area with the Burdigalian Stage of Europe (ca. 18.0 to 17.0 Ma) |
| 6 | Pancho Rico Formation | Latest Miocene | Unusually well-preserved megainvertebrate fauna includes pectinids, echinoids, muricid gastropods, and barnacles (USGS loc. M903) |
| 7 | Pancho Rico Formation | Latest Miocene | Extensive, well-documented megainvertebrate fauna includes echinoids, gastropods, pelecypods, and barnacles (USGS loc. M1935) |
| 8 | Pancho Rico Formation | Latest Miocene | Well-exposed and well-preserved bioherm of the colonial barnacle, Balanus gregarious (Conrad), is one of only two known fossil localities in the Tertiary of California (USGS loc. 3586) |
| 9 | Point of Rocks sandstone | Eocene | The stratigraphically significant larger foraminifer Discocyclina sp. that occurs here and at several nearby localities (Bradbury, 1941) is rare elsewhere in California |
| 10 | Church Creek Formation | Late Eocene | One of the few recorded occurrences of stratigraphically diagnostic planktic foraminifers in California marine strata assigned to the Refugian Stage (USGS locs. Mf2616) |
| 11 | Vaqueros Formation | Early to middle Oligocene | This stratigraphically significant molluscan assemblage at the Indians (Indian Ranch) is recognized in only a few widely scattered localities in the California Coast Ranges (USGS loc. M6557) |
| 12 | Unnamed sandstone unit in the Upper Cretaceous sedimentary rocks (Eastern facies) of Hall, 1991 | Late Cretaceous | Megainvertebrate fossils from Slate's Hot Springs (Esalen) are one of the few stratigraphically diagnostic assemblages from the Cretaceous sedimentary rocks of the Point Sur region |

**Source:** County of Monterey 2023.

## 4.7.3 Method of Analysis

The analysis contained herein addresses potential impacts to paleontological resources from a programmatic-level and countywide approach, recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC would be facilitated by the project through identification and rezoning to encourage residential development. Where appropriate and possible, individual opportunity sites are discussed.

Given that the thresholds of significance in this section are primarily based on the location and soil conditions of each site rather than the number of housing units proposed (refer to Section 4.7.4, Thresholds of Significance), this section of the PEIR evaluates each of the opportunity site parcels to determine impacts on geological (paleontological) resources. The environmental topics evaluated under Thresholds 1 through 5 are discussed in Chapter 7. The impact analysis in Section 4.7.5, Project Impacts and Mitigation, is focused on paleontological resources (Threshold 6).

## 4.7.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on geology and soils if it would:

- **Threshold 1:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- **Threshold 2:** Result in substantial soil erosion or the loss of topsoil.
- **Threshold 3:** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- **Threshold 4:** Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- **Threshold 5:** Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- **Threshold 6:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Section 7.1 of this PEIR determined that the following thresholds would have less than significant impact or no impact, and these environmental topics will not be addressed further in this section of the PEIR:

- Threshold 1
- Threshold 2
- Threshold 3
- Threshold 4
- Threshold 5

## 4.7.5 Project Impacts and Mitigation

The following section addresses the potential impacts relating to paleontological resources that could result from implementation of the project.

### 4.7.5.1 Threshold 6: Paleontological Resources

**Threshold 6:** Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

### Impact Analysis

Paleontological resources are the remains and traces of prehistoric plant and animal life exclusive of man. Fossil remains such as bones, teeth, shells, leaves, and wood are found in the geologic deposits within which they were originally buried. Paleontological resources can be thought of as including not only the actual fossil remains but also the collecting localities and geologic formations containing those remains.

The opportunity sites could be underlain by geologic formations that produce fossils. Therefore, deeper excavation for future development projects may encounter paleontological resources. Table 4.7-3, Opportunity Sites Soil Type and Age, describes the underlying soil types based on U.S. Geological Survey data. General soil types and their descriptions are also provided below:

- **Q:** Quaternary young (Pleistocene-Holocene) alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly non-marine, but includes marine deposits near the coast. These sediments date from modern times to the Pleistocene (11,000 years ago), and form as a result of alluvial or fluvial activity. As recent sediments, these units contain low paleontological resource potential at the surface. However, these sediments increase in age with depth. The depth at which Holocene sediments are old enough to preserve fossil resources (i.e., more than 5,000 years old) or transitions to Older alluvium is highly variable and often unknown for any specific area.
- **Qs:** Quaternary young (Holocene) dune sand. Extensive marine and non-marine sand deposits, generally near the coast or desert playas. These sediments date from modern times to the Pleistocene (11,000 years ago), and form as a result of wind deposition of sand. Holocene-aged units are too young to contain scientifically significant paleontological resources and are considered to have low paleontological sensitivity. However, these younger deposits may grade downward into fine-grained Quaternary old (i.e., Pleistocene) alluvial deposits (e.g., Qoa), which may preserve fossil remains.
- **QPc:** Pliocene-Pleistocene sandstone, shale, and gravel deposits; mostly loosely consolidated. These sediments are likely derived from the California Coast Range to the west. This unit is known to contain widely scattered and scientifically significant paleontological resources.

- **Qoa:** Pleistocene, Older alluvium, lake, playa, and terrace deposits. These deposits represent ancient environments where organisms could have lived and been preserved and, therefore, could contain fossils.
- **M:** Miocene Marine Sediments consist of sandstone, shale, siltstone, conglomerate, and breccia deposited; moderately to well consolidated. The Vaqueros and Puente Formations included in this unit could contain paleontological resources.
- **Tv:** Tertiary volcanic flow rocks; minor pyroclastic deposits. Because of the high temperature of lava, these sediments will not usually preserve fossil resources and, therefore, would have low sensitivity for paleontological resources.

**Table 4.7-3. Opportunity Sites Soil Type and Age**

| Opportunity Sites | Epoch | Soil Type Symbol | Opportunity Sites | Epoch | Soil Type Symbol |
|---|---|---|---|---|---|
| 1 | Pleistocene | Qoa | 30 | Pleistocene-Holocene | Q |
| 2 | Pleistocene | Qoa | 31 | Pleistocene-Holocene | Qs |
| 3 | Pleistocene | Qoa | 32 | Pleistocene | Qoa |
| 3 | Pleistocene-Holocene | Q | 33 | Pleistocene | Qoa |
| 4 | Pleistocene-Holocene | Q | 34 | Pleistocene | Qoa |
| 5 | Pleistocene | Qoa | 35 | Pleistocene-Holocene | Q |
| 6 | Pleistocene | Qoa | 36 | Pleistocene-Holocene | Q |
| 8 | Pleistocene-Holocene | Q | 37 | Pleistocene-Holocene | Q |
| 9 | Pleistocene-Holocene | Q | 38 | Pleistocene-Holocene | Q |
| 10 | Pleistocene-Holocene | Q | 39 | Pleistocene-Holocene | Q |
| 11 | Pleistocene-Holocene | Q | 40 | Miocene | M |
| 12 | Pleistocene-Holocene | Q | 41 | Pleistocene-Holocene | Q |
| 13 | Pleistocene-Holocene | Q | 42 | Pleistocene | Qoa |
| 14 | Pleistocene-Holocene | Q | 43 | Tertiary | Tv |
| 15 | Pleistocene-Holocene | Q | 43 | Pleistocene-Holocene | Q |
| 16 | Miocene | M | 44 | Pleistocene-Holocene | Q |
| 17 | Pleistocene-Holocene | Q | 45 | Miocene | M |
| 18 | Pleistocene-Holocene | Q | 46 | Pliocene-Pleistocene | QPc |
| 19 | Pleistocene-Holocene | Q | 47 | Pliocene-Pleistocene | QPc |
| 20 | Pleistocene-Holocene | Q | 47 | Pleistocene-Holocene | Qs |
| 21 | Pleistocene-Holocene | Q | 48 | Pleistocene | Qoa |
| 21 | Pleistocene-Holocene | Q | 49 | Pleistocene-Holocene | Q |
| 23 | Pleistocene-Holocene | Q | 50 | Pleistocene-Holocene | Q |
| 24 | Pliocene-Pleistocene | QPc | 51 | Pleistocene-Holocene | Q |
| 24 | Pleistocene-Holocene | Q | 52 | Pliocene-Pleistocene | QPc |
| 25 | Pleistocene-Holocene | Q | 53 | Pleistocene-Holocene | Qs |
| 26 | Pleistocene-Holocene | Q | 54 | Pleistocene-Holocene | Q |
| 27 | Pleistocene-Holocene | Q | 55 | Pleistocene-Holocene | Q |

**Table 4.7-3. Opportunity Sites Soil Type and Age**

| Opportunity Sites | Epoch | Soil Type Symbol | Opportunity Sites | Epoch | Soil Type Symbol |
|---|---|---|---|---|---|
| 28 | Pleistocene-Holocene | Q | 56 | Pleistocene-Holocene | Q |
| 29 | Pleistocene-Holocene | Q | 64 | Pleistocene-Holocene | Q |

**Source:** USGS 2025.

**Notes:** M = Miocene Marine Sediments consist of sandstone, shale, siltstone, conglomerate, and breccia deposited; Q = Quaternary young (Pleistocene-Holocene) alluvium, lake, playa, and terrace deposits; Qoa = Pleistocene, Older alluvium, lake, playa, and terrace deposits; QPc = Pliocene-Pleistocene sandstone, shale, and gravel deposits; Tv = Tertiary volcanic flow rocks; minor pyroclastic deposits

As described in Table 4.7-3, the opportunity sites are composed of Holocene- to Miocene-aged deposits, which may include geologic formations capable of yielding paleontological resources. Soil types QPc, Qoa, and M may contain such resources, and although soil types Q and Qs are generally too young to contain significant paleontological resources, they may transition to Older alluvium at depth and may also have paleontological potential depending on the depth of excavation. Therefore, the specific geologic formations present at each site would need to be confirmed during the project-specific development application process, when excavation depth is known, to evaluate potential impacts on paleontological resources.

Furthermore, the 2010 General Plan's Conservation and Open Space Element Policy OS-7.1 requires that important, representative, and unique paleontological sites and features be identified and protected. The policy states that developers must complete Phase I (reconnaissance-level) paleontological reviews in any geologic formation known to yield important fossil resources. Therefore, each development application would be required to include a reconnaissance-level paleontological review, and if significant fossil deposits are discovered during grading, a data recovery effort would be required to obtain a sample of materials from such deposits before they are destroyed. In addition, the North County LUP and Carmel Area LUP both encourage the timely identification and evaluation of paleontological resources so these resources are considered during the conceptual design phase or project development. The North County LUP also states that no development proposals in archaeologically sensitive areas or areas with archaeological, historical, or paleontological resources shall be categorically exempt from environmental review. This policy would apply specifically to Site 48, which is in the North County LUP area. The North County and Carmel Area Coastal Implementation Plans both require a mitigation plan where construction on or reconstruction impacts to an identified paleontological site cannot be avoided, as verified in the archaeological report prepared for the construction project. The mitigation plan shall include recommended preservation measures in accordance with the guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission, and the report shall be filed with the State Office of Historic Preservation. As such, opportunity sites within these plan areas (Opportunity Sites 16, 43, and 48) would require a mitigation plan if the reconnaissance-level paleontological review identifies paleontological resources on site that cannot be avoided by development. As shown in Table 4.7-3, opportunity sites occur on geologic

formations that may yield paleontological resources. Therefore, this is considered a potentially significant impact on paleontological resources, and mitigation is required.

Mitigation Measure (MM-) GEO-OBJ-1 and MM-GEO-CONS-2 would require reconnaissance-level paleontological review for projects streamlining under the HEU6 which require excavation of previously undisturbed soils that would disturb underlying geologic units. If the reconnaissance-level paleontological review identifies potential for excavation of geologic formations capable of yielding paleontological resources, a project-specific paleontological resource monitoring and mitigation plan must be prepared. Through the review for paleontological resources in underlying geologic units as required under MM-GEO-OBJ-1 and MM-GEO-CONS-2, the County would assess and require curation and archival procedures during construction. Therefore, with the implementation of the mitigation measures described above, impacts would be reduced to a less than significant level.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Paleontological review of HEU6 residential projects will be required through MM-GEO-OBJ-1 and MM-GEO-CONS-2 below.

**MM-GEO-OBJ-1:** If any by-right development streamlining under the Objective Process requires excavation of previously undisturbed soils that would disturb underlying geologic units, a reconnaissance-level paleontological review shall be submitted to the County of Monterey (County) as part of the development application package to determine the level of paleontological resource sensitivity. The reconnaissance-level paleontological review shall include construction plans, geotechnical reports (if available), and subsurface geological observations that indicate the likely depth to undisturbed soils that possess high paleontological sensitivity. The County shall ensure that these items are included in the reconnaissance-level paleontological review.

If the reconnaissance-level paleontological review identifies a potential for excavation of geologic formations capable of yielding paleontological resources, a project-specific paleontological resource monitoring and mitigation plan shall be prepared and submitted to the County prior to approval of the grading permit, or if no grading permit is required, prior to beginning earthwork. The paleontological resource monitoring and mitigation plan shall include a description of the residential project and geological setting, records search and survey results, on-site monitoring procedures, procedures to halt work immediately upon encountering fossils to ensure they can be salvaged, procedures for preparation and curation of paleontological resources, worker awareness

training, and a final report with documentation of the findings. The County shall ensure that these items are included in the plan. The paleontological resource monitoring and mitigation shall be implemented by a qualified project paleontologist or by a paleontological resources monitor under the supervision of the qualified project paleontologist. As part of the project-specific paleontological resource monitoring and mitigation plan, the project paleontologist shall conduct or supervise the following mitigation tasks:

- Monitoring of excavation operations to discover unearthed fossil remains, generally involving monitoring of ongoing excavation activities (e.g., sheet grading pads, cutting slopes and roadways, basement and foundation excavations, and trenching).
- Salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimens, but possibly also plaster-jacketing of individual large and/or fragile specimens, or more elaborate quarry excavation of richly fossiliferous deposits.
- Recording of stratigraphic, geologic and geographic data to provide a context for the recovered fossil remains, including accurate plotting (mapping) on grading plans and standard topographic maps of all fossil localities, description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section (unless considered by the project paleontologist to be infeasible), and photographic documentation of the geologic setting.
- Laboratory preparation (cleaning and repair) of collected fossil remains to the point of identification (not exhibition), generally involving removal of enclosing sedimentary rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens.
- Curation of prepared fossil remains, typically involving scientific identification and cataloging of specimens, and entry of data into one or more accredited institutional (museum or university) collection (specimen/species lot and locality) databases.
- Transfer, for archival storage, of cataloged fossil remains and copies of relevant field notes, maps, stratigraphic sections, and photographs to an accredited institution (museum or university) in California that maintains paleontological collections (e.g., Pacific Grove Museum of Natural History, Moss Landing Marine Laboratories, Santa Cruz Museum of Natural History).
- Preparation of a final report summarizing the results of the field investigation, laboratory methods, stratigraphic information, types and importance of collected fossils, and any necessary graphics to document the stratigraphy and precise fossil collecting localities.

**MM-GEO-CONS-2:** Applicants for developments streamlining under the Consistency Process that would disturb underlying geologic units on opportunity sites that require excavation of previously undisturbed soils shall be required to prepare and submit a reconnaissance-level paleontological review to the County as part of the development application package to determine the level of paleontological resource sensitivity. If the reconnaissance-level paleontological review identifies a potential for excavation of geologic formations capable of yielding paleontological resources, a project-specific paleontological resource monitoring and mitigation plan shall be prepared and submitted to the County.

Refer to MM-GEO-OBJ-1, above, for all standards and requirements for MM-GEO-CONS-2.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.7.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to geology and soils that could result from implementation of the project.

### 4.7.6.1 Cumulative Threshold 6: Paleontological Resources

Cumulative impacts to paleontological resources could occur if the project, in combination with other cumulative projects, incrementally lead to an increase in disturbed, potentially significant paleontological resources throughout Monterey County. Future development projects under buildout of the HEU6 in conjunction with cumulative projects would lead to an overall increase in ground disturbance from construction activities that could contribute to cumulative disturbance of potentially significant resources. However, implementation of MM-GEO-OBJ-1 and MM-GEO-CONS-2 would reduce the project's potential to impact unknown paleontological resources by requiring a reconnaissance-level paleontological review, and if warranted, construction monitoring and recovery of resources, as needed, by a qualified project paleontologist. Most cumulative development projects would be subject to CEQA, and potential impacts to paleontological resources would be evaluated and addressed on a project-by-project basis, with each potential project complying with federal, state, and local conservation, preservation, and data recovery requirements. Therefore, cumulative impacts to paleontological resources would be less than significant and require mitigation to be incorporated.

### Significance of Impact

Potentially significant impact.

### Mitigation Measure

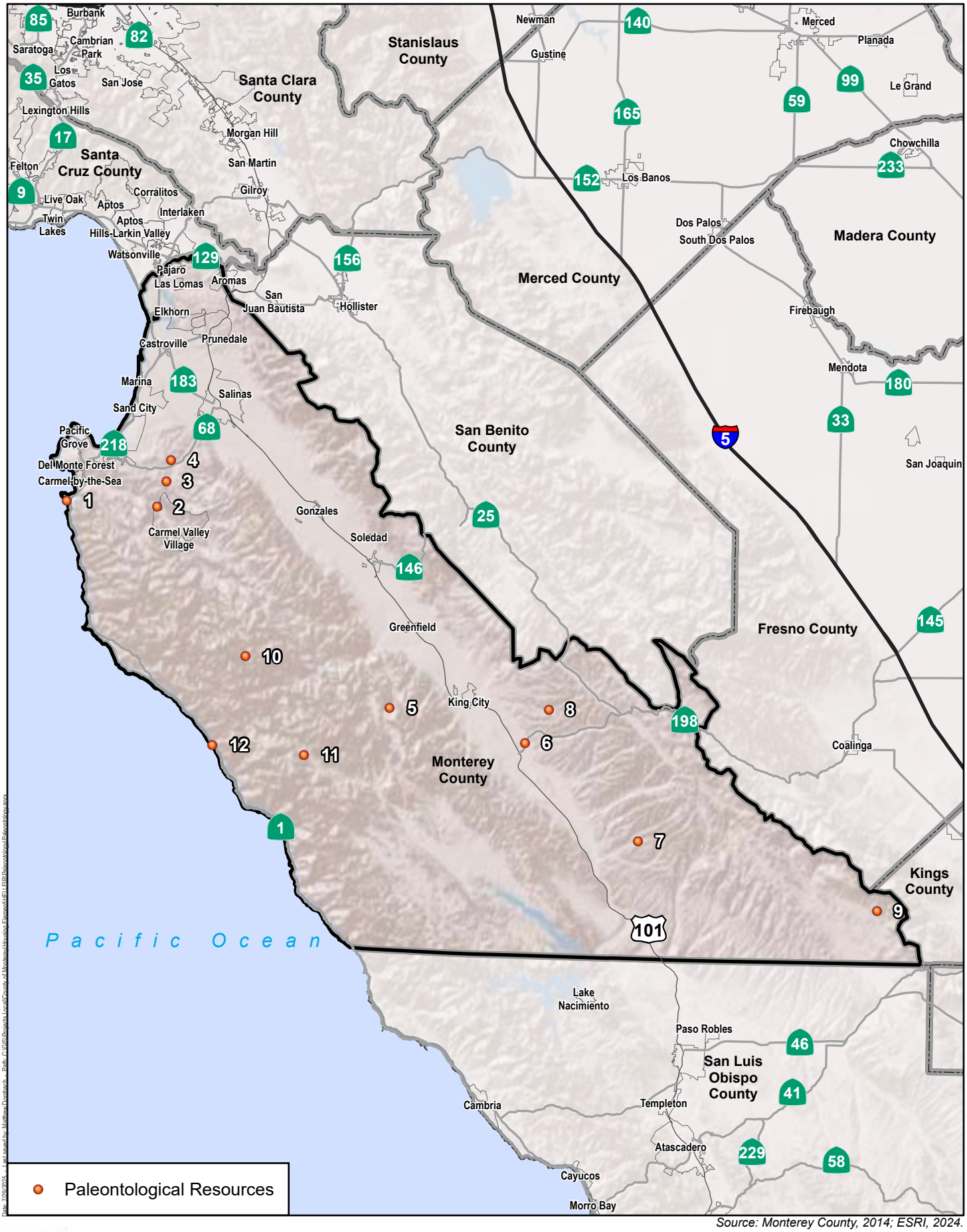
Refer to MM-GEO-OBJ-1 and MM-GEO-CONS-2.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.7.7 Conclusion

Implementation of MM-GEO-OBJ-1 and MM-GEO-CONS-2 would reduce potential impacts pertaining to paleontological resources to a less than significant level.




*Source: Monterey County, 2014; ESRI, 2024.*

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**Figure 4.7-1**

Paleontological Resources in Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# 4.8 Greenhouse Gas Emissions

This section evaluates the potential for impacts related to greenhouse gas (GHG) emissions resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.8.1 Regulatory Setting

This section describes the federal, state, regional, and local regulatory framework adopted to address GHG emissions.

### 4.8.1.1 Federal

#### U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address global climate change. In 2009, the USEPA issued a Final Rule for mandatory annual reporting of GHG emissions. This rule applies to fossil fuel and industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles. This rule does not regulate GHG emissions; it only requires the monitoring and reporting of GHG emissions for those sources above certain thresholds.

#### Federal Clean Air Act

On April 2, 2007, the U.S. Supreme Court ruled, in Massachusetts v. USEPA, that $CO_2$ is an air pollutant, as defined under the Clean Air Act, and that the USEPA has the authority to regulate GHG

emissions. The USEPA announced that GHGs (including $CO_2$, $CH_4$, $N_2O$, hydrofluorocarbons, perfluorocarbons, and $SF_6$) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration. The standards have continued to be updated to include additional standards for future vehicle model years regarding fuel efficiency and GHG emissions reduction, clean fuels, and advanced vehicle infrastructure. In December 2021, the USEPA finalized revised national GHG emissions standards for passenger cars and light trucks for model years 2023–2026.

#### 4.8.1.2 State

### Assembly Bill 32 and Senate Bill 32: California Global Warming Solutions Act

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce greenhouse gas emissions in California. AB 32 requires the California Air Resources Board (CARB) to reduce statewide GHG emissions to 1990 levels by 2020. As part of this legislation, CARB was required to prepare a "Scoping Plan" that demonstrates how the state will achieve this goal. The first Scoping Plan was adopted in 2011 and describes local governments as "essential partners" in meeting the statewide goal, recommending a GHG reduction level 15 percent below 2005–2008 levels (depending on when a full emissions inventory is available) by 2020. Senate Bill (SB) 32, signed in 2016, requires CARB to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030.

### 2022 Climate Change Scoping Plan

As directed by AB 32, CARB adopted the first Climate Change Scoping Plan (Scoping Plan) in December 2008, in accordance with California Health and Safety Code, Section 38561. The Scoping Plan included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. The most recent update to the Scoping Plan was adopted by CARB in December 2022 (2022 Scoping Plan). The 2022 Scoping Plan assesses progress toward the statutory 2030 target of at least 40 percent below 1990 emissions, in accordance with SB 32, and identifies a path to achieving carbon neutrality and reducing anthropogenic GHG emissions by 85 percent below 1990 levels by 2045, as directed by AB 1279 (CARB 2022b, 2026a).

2022 Scoping Plan Appendix D, Local Actions, includes recommendations intended to build momentum for local government actions that align with the state's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA). 2022 Scoping Plan Appendix D includes Table 3, Key Residential and Mixed-Use Project Attributes that Reduce GHGs, provided below as Table 4.8-1,

Key Residential and Mixed-Use Project Attributes That Reduce Greenhouse Gases (2022 Scoping Plan Table 3).

**Table 4.8-1. Key Residential and Mixed-Use Project Attributes That Reduce Greenhouse Gases (2022 Scoping Plan Table 3)**

| Priority Areas | Key Project Attribute |
|---|---|
| Transportation Electrification | Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval[1] |
| VMT Reduction | Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)[2] |
| | Does not result in the loss or conversion of natural and working lands |
| | Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre)[3], or Is in proximity to existing transit stops (within a half mile)[4] or<br>Satisfies more detailed and stringent criteria specified in the region's SCS[5] |
| | Reduces parking requirements[6] by:<br>Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or<br>Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or<br>For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit[7] |
| | At least 20 percent of units included are affordable to lower-income residents[8,9] |
| | Results in no net loss of existing affordable units |
| Building Decarbonization | Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking[10,11] |

**Source:** CARB 2022b.

**Notes:**

1 California Code of Regulations, Title 24, Part 11.

2 California Government Code, Section 65041.1. "Statewide Environmental Goals and Policy Report." Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65041.1.

3 Federal Transit Administration. 2014. Planning for Transit-Supportive Development: A Practitioner's Guide. Available at: https://www.transit.dot.gov/funding/funding-finance-resources/transit-oriented-development/planningtransit-supportive.

4 Washington Department of Transportation. 2013. Tools for Estimating VMT Reductions from Built Environment Changes. Available at: https://www.wsdot.wa.gov/research/reports/fullreports/806.3.pdf.

5 One example of an evaluation of consistency with the region's SCS is from the 2013 draft EIR for The Cannery in Davis, p. 3.7-26. Available at: https://www.cityofdavis.org/home/showpublisheddocument/650/635607772224000000.

6 CAPCOA. 2021. Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers. Available at: https://caleemod.com/handbook/index.html.

7 AB 2097, adopted by the Legislature and signed by the Governor in September 2022 eliminates parking requirements for residential and commercial development within a half-mile of transit. California Government Code, Section 65863.2. "Residential, commercial, or other development types: parking requirements." Available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB2097

8 Newmark, G. and Haas, P. 2015. Income, Location Efficiency, and VMT: Affordable Housing as a Climate Strategy. Available at: https://chpc.net/wp-content/uploads/2016/05/CNT-Working-Paper-revised-2015-12-18.pdf.

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### Assembly Bill 1279: California Climate Crisis Act

AB 1279, enacted in September 2022, updates the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below the 1990 levels by 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement various policies and strategies that enable $CO_2$ removal solutions and carbon capture, utilization, and storage technologies in California, as specified. The bill also requires CARB to submit an annual progress report.

### Assembly Bill 341: Commercial Recycling

AB 341 sets a statewide goal of 75 percent recycling, composting, or source reduction of solid waste by the year 2020. As required by AB 341, the California Department of Resources Recycling and Recovery (CalRecycle) adopted the Mandatory Commercial Recycling Regulation on January 17, 2012. The regulation was approved by the Office of Administrative Law on May 7, 2012. Effective immediately, it clarified mandatory commercial recycling responsibilities. The Mandatory Commercial Recycling Regulation focuses on increased commercial waste diversion as a method to reduce GHG emissions. The regulation is designed to achieve a reduction of 5 million metric tons (MMT) $CO_2$ in GHG emissions, which equates to roughly an additional 2–3 metric tons (MT) $CO_2$ of currently disposed commercial solid waste being recycled by 2020 and thereafter.

### Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the California Energy Commission (CEC) to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other state, federal, and local agencies. The State Alternative Fuels Plan presents strategies and actions that California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The State Alternative Fuels Plan assesses various alternative fuels and develops fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of either public health or environmental quality.

### Assembly Bill 1493: Clean Car Standards

Also known as "Pavley I," AB 1493 provided the nation's first GHG standards for automobiles. AB 1493 required CARB to adopt vehicle standards that lower GHG emissions from new light-duty automobiles to the maximum extent feasible. In January 2012, CARB adopted the Advanced Clean Cars Program to achieve additional GHG emissions reductions for passenger vehicles for model years 2017–2025. The program includes low-emission vehicle (LEV) and zero-emission vehicle regulations. Together, the two standards increased average fuel economy to roughly 43 miles per gallon in 2020 (and more for years beyond 2020). However, in 2025, Congress voted to disapprove USEPA's actions to grant California waivers for several regulations in the model, including the clean car standards. These federal actions are currently being contested by the State (CARB 2026b).

### Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

### California Code of Regulations Title 24, Part 6

California Code of Regulations, Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings), was established in 1978 to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although the standards were not originally intended to reduce GHG emissions, electricity production by fossil fuels and natural gas use result in GHG emissions, and energy-efficient buildings require less electricity and natural gas. Therefore, increased energy efficiency results in decreased GHG emissions.

The CEC adopted its 2008 Standards on April 23, 2008, in response to AB 32. The 2008 Standards were adopted to (1) provide California with an adequate, reasonably priced, and environmentally sound supply of energy; (2) pursue California energy policy, which states that energy efficiency is the resource of first choice for meeting California's energy needs; (3) meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes every 3 years; and (4) meet the requirements of Executive Order (EO) B-18-12 and those in the Green Building Initiative to improve the energy efficiency of non-residential buildings through aggressive standards.

The latest update to the Title 24 Standards went into effect on January 1, 2026 (the 2025 Standards). The 2025 Standards encourage efficient electric heat pumps, establish electric-ready

requirements for new homes, expand solar photovoltaic and battery storage standards, and strengthen ventilation standards. These standards will remain in place for 6 years, rather than the 3 years, as required by AB 130, described below.

### California Green Building Standards Code (California Code of Regulations, Title 24, Part 11)

The California Green Building Standards Code (24 CCR Part 11) contains mandatory requirements for new residential and non-residential buildings throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations. The current 2025 Standards for new construction of and additions and alterations to residential and non-residential buildings went into effect on January 1, 2026.

The California Green Building Standards Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the Governor's directives. The code was established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction.

The 2025 Standards include residential requirements for solar photovoltaic systems and electric vehicle (EV) charging infrastructure, and increased residential requirements to be electric appliance-ready and require heat pumps in single-family homes for heating. Additionally, the California Green Building Standards Code contains requirements for stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resources conservation, and site irrigation conservation. The code provides design options that allow the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, function at maximum efficiency.

### Executive Order B-30-15: 2030 Greenhouse Gas Emissions Reduction Target

On April 29, 2015, Governor Jerry Brown issued EO B3015, which set a GHG emissions target of 40 percent 1990 levels by 2030. This is an interim-year goal to make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050. The EO directs CARB to provide a plan with specific regulations to reduce statewide sources of GHG emissions. EO B-30-15 does not include a specific guideline for local governments.

### Executive Order N-79-20: Zero-Emission Vehicles

EO N-79-20, signed by Governor Gavin Newsom on September 23, 2020, directs the state to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles to reduce transportation GHG emissions, the primary source of emissions in the state. Following the

EO, CARB will develop regulations to mandate that 100 percent of in-state sales of new passenger cars and trucks are zero emission by 2035 and that all operations of medium- and heavy-duty vehicles shall be 100 percent zero emission by 2045, where feasible.

### Executive Order S-01-07: Low Carbon Fuel Standard

In 2007, Governor Arnold Schwarzenegger signed EO S0107, which mandates that (1) a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and (2) a low carbon fuel standard (LCFS) for transportation fuels be established in California. CARB developed the LCFS regulation pursuant to the state's authority under AB 32 and the federal Clean Air Act and adopted it in 2009.

### Executive Order S-3-05: Greenhouse Gas Emissions Reduction Targets

On June 1, 2005, Governor Schwarzenegger announced, through EO S-3-05, the following GHG emissions targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also laid out state agencies' responsibilities for implementation and reporting on progress toward these targets.

### Senate Bill 97: California Environmental Quality Act Greenhouse Gas Emissions

SB 97, enacted in 2007, amended the CEQA to clearly establish that GHG emissions and their effects are required subjects of CEQA analysis. The legislation directed the California Governor's Office of Planning and Research (now named the Governor's Office of Land Use and Climate Innovation) to develop Draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the resources agency to certify and adopt the CEQA Guidelines. CEQA Guidelines, Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the CEQA Guidelines amendments that became effective in 2010. The guideline sets forth the criteria needed in a GHG reduction plan that would allow for tiering and streamlining of CEQA analysis for development projects.

### Senate Bill 375: Sustainable Communities Strategy

SB 375, adopted in 2008, provided a new planning process coordinating land use planning, Regional Transportation Plans, and funding priorities to help California meet AB 32's GHG reduction goals. SB 375 requires Regional Transportation Plans, developed by Metropolitan Planning Organizations, to incorporate a Sustainable Communities Strategy in their Regional Transportation Plans. The goal of the Sustainable Communities Strategy is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns.

SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development.

### Assembly Bill 130/Senate Bill 131

AB 130 and SB 131, signed into effect in June 2025, are intended to streamline CEQA review of new housing development. The bills expanded CEQA exemptions for qualifying housing projects, specifically new infill development. AB 130, effective October 1, 2025, through June 1, 2031, limited local jurisdictions' ability to update building codes to apply more restrictive standards to housing development, including green building standards.

#### 4.8.1.3 Regional

### AMBAG Regional Growth Forecast

The Association of Monterey Bay Area Governments (AMBAG) is the MPO (Metropolitan Planning Organization) for the Monterey Bay Area. AMBAG develops population, housing, and employment forecast estimates for the Monterey Bay region. The AMBAG forecast model is employment-driven using a shift-share model based on local data as well as state and national trends. Forecasted employment growth informs population growth, which in turn drives household and housing growth. AMBAG first identifies regional- and county-level forecast figures, then disaggregating county-level forecast numbers to the jurisdictional level for using in city- and county-planning documents. The regional growth forecast supports AMBAG planning efforts such as the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), described below.

### Metropolitan Transportation Plan/Sustainable Communities Strategy

The AMBAG is the MPO for the Monterey Bay Area. As the MPO, AMBAG is required to prepare the MTP/SCS, which is the long-range transportation plan for the Monterey Bay region. The MTP/SCS identifies regional transportation needs, investment priorities to meet those needs, and local, regional, state, and federal transportation funding the Monterey Bay region expects to receive for these investments. AMBAG coordinates the development of the MTP with Regional Transportation Planning Agencies (San Benito County Council of Governments, the Santa Cruz County Regional Transportation Commission and the Transportation Agency for Monterey County), transit providers (San Benito County Local Transit Authority, Monterey-Salinas Transit, and Santa Cruz METRO), the Monterey Bay Air Resources District, state and federal governments, and organizations having interest in or responsibility for transportation planning and programming. AMBAG also coordinates transportation planning and programming activities with the three counties and 18 local jurisdictions in the Monterey Bay region. The SCS demonstrates the region's ability to exceed the GHG emissions reduction targets set forth by the CARB. The SCS outlines the region's plan for integrating the transportation network in an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands while

reducing GHG emissions. The overall SCS land use development pattern complements the proposed transportation network, which emphasizes multimodal system enhancements, system preservation, and improved access to high-quality transit.

On Wednesday, June 15, 2022, the AMBAG Board of Directors adopted the Final 2045 MTP/SCS. Federal and state law requires that AMBAG prepare a long-range transportation plan every four years. Therefore, AMBAG is currently conducting outreach for preparation of Connect Monterey Bay 2050, the 2050 MTP/SCS.

### AMBAG Natural and Working Lands Climate Mitigation and Resiliency Study

On December 6, 2021, the California Department of Conservation awarded AMBAG a Sustainable Agricultural Lands Conservation program planning grant to fund the creation of a Monterey Bay Natural and Working Lands Climate Mitigation and Resiliency Study. The study includes an inventory of natural and working lands carbon stock in the AMBAG region by jurisdiction, a carbon forecast, and a list of adaptation and mitigation strategies with recommended implementation actions. The strategies are intended to locally support the implementation of the treatments listed in the CARB 2022 Scoping Plan. The goal of the study is to empower stakeholders to consider the health of natural and working lands as a part of long-range planning, as well as provide an opportunity for cities and counties to further integrate natural and working land GHG mitigation strategies as part of their climate action planning process.

#### 4.8.1.4 Local

### 2010 General Plan (Inland)

#### *Conservation and Open Space Element*

Policy OS-10.10 of the Monterey County General Plan (2010 General Plan) requires consideration of the following sustainable land use strategies in the design of future development in Community Areas and Rural Centers to minimize GHG emissions:

- Take an integrated approach to siting, design, and operation of buildings and infrastructure
- Incorporate multiple uses for infrastructure (e.g., recreational fields designed to capture stormwater and reduce urban runoff)
- Design development to take advantage of solar orientation
- Recycle brownfield sites
- Employ individual and systematic water conservation measures (e.g., native vegetation, bioswales, gray water reuse, high efficiency appliances)
- Promote Transit-Oriented Development to increase mobility and reduce auto dependency
- Provide preferential carpool/vanpool parking spaces
- Implement a parking surcharge for single occupant vehicles
- Provide for shuttle/mini bus service

- Provide bicycle storage/parking facilities and shower/locker facilities
- Provide on-site childcare centers
- Provide transit design features in the development
- Develop park-and-ride lots
- Employ a transportation/rideshare coordinator
- Implement a rideshare program
- Provide incentives to employees to rideshare or take public transportation
- Implement compressed work schedules
- Implement telecommuting program
- Provide bicycle paths in major subdivisions that link to an external network
- Provide pedestrian facilities in major subdivisions

Policy OS-10.11 requires the County to develop a community climate action plan. Policy OS-10.15 requires the County to both quantify current and projected County GHG emissions and adopt a GHG Reduction Plan for County Operations. A community climate action plan is currently being prepared, as discussed below.

#### *Circulation Element*

The Circulation Element includes policies that would result in GHG emissions reductions through encouraging alternative transportation:

- Policy C-2.6 encourages bicycle and automobile storage facilities in conjunction with public transportation facilities.
- Policy C-3.5 encourages transportation alternatives such as bicycles, carpools, public transit, and compact vehicles within and outside the public right-of-way.
- Policy C-4.3 requires consideration of the needs of bicyclists and pedestrians in all public rights-of-way.
- Policy C-4.5 requires new public local and collector roads to be located and designed to minimize disruption of existing development, discourage through auto traffic and provide for bicycle and pedestrian traffic within the right-of-way.
- Policy C-6.5 encourages use of public transit and alternative modes of transportation through land use designations and zoning which cluster employment centers with a mix of other uses, and project design that incorporates carpool areas, “park and ride” facilities and similar incentives.
- Policy C-9.2 requires construction or expansion of roadways within major transportation corridors to consider improved bike routes.

- Policy C-9.3 requires the County to promote the safe integration of bicycle systems with other public transportation modes.
- Policy C-9.6 requires new and improved multi-modal transfer facilities, such as transit centers and park-and-ride lots, to include adequate bicycle access and secure bicycle parking facilities.

### Monterey County Community Climate Action and Adaptation Plan

The County is currently preparing a Community Climate Action and Adaptation Plan (CCAAP). A draft of the CCAAP was released to the public in April 2026 (County of Monterey 2026). The CCAAP is an effort to reduce greenhouse gas emissions in line with the targets set by the State of California through 2045. The CCAAP targets include reducing community GHG emissions by 28 percent below 2019 emissions by 2030, 66 percent below 2019 emissions by 2040, and 86 percent below 2019 emissions by 2045. Strategies to reduce GHG emissions include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation, including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. The CCAAP also includes actions for protecting natural and working lands, including urban forests and green spaces in developed lands. The strategies described in the CCAAP provide the County with a viable pathway to meet its climate goals of 28 percent reduction in 2030 and 66 percent reduction in 2040. The CCAAP provides progress toward but does not project achievement of the 2045 goal. The largest source of emissions in 2045 is anticipated to come from agricultural operations, primarily associated with grazing livestock, which provides value to the community that makes operational change to reduce emissions difficult. The County will continue to seek opportunities to maintain carbon held in natural and working lands to meet its long-term 2045 GHG reduction target. A community GHG emissions inventory has been completed as part of the CCAAP effort.

### Monterey County Code

Sections 20.64.250 and 21.64.250 of the Monterey County Code (County Code) required future development proposing 25 or more units to submit a Trip Reduction Checklist as part of the ministerial or discretionary permit application materials. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees and customers of the development. Chapter 18.44, Residential and Commercial Water Conservation Measures, reduces GHG emissions from water use by requiring the installation of low water use plumbing fixtures and low water use landscape material as part of new construction. Section 18.11.040, Renewable Energy Generation Requirements, requires consistency with Part 11 of Title 24 of the California Building Standards Code related to renewable energy generation.

### Area and Land Use Plans

#### *Toro Area Plan*

Policy T-2.10 states that increasing the accessibility of Toro residents to mass transit, either through maintenance of existing park-and-ride lots or new bus service, particularly in the Corral de Tierra, San Benancio, and River Road areas, should be studied and implemented.

#### *Greater Monterey Peninsula Area Plan*

Policy GMP-2.9 encourages construction and expansion of all highways and major arterials to provide for bike paths and states that it is desirable that bike paths be physically separate from motorized traffic.

#### *North County Land Use Plan*

Land Use Plan Key Policy 3.1.1 focuses on the uncongested flow of traffic, but states that public transportation should be expanded to provide a viable transportation alternative.

#### *Carmel Area Land Use Plan*

Recommended Action 3.1.4 encourages initiation of a program by Monterey Peninsula Transit or other public carriers, in cooperation with appropriate recreational agencies, the County, and community representatives, to provide bus stops at appropriate access points and to expand bus service to recreation areas and visitor-serving facilities. Bus routes should be scheduled to serve residents' needs as well as the needs of visitors.

## 4.8.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to GHG emissions.

### 4.8.2.1 Global Climate Change Overview

Climate change refers to any substantial change in measures of climate (such as temperature, precipitation, or wind) lasting for decades or longer. Earth's climate has changed many times during the planet's history, including events ranging from ice ages to long periods of warmth. Historically, natural factors, such as volcanic eruptions, changes in Earth's orbit, and the amount of energy released from the sun, have affected Earth's climate. Some GHGs, such as water vapor, occur naturally and are emitted to the atmosphere through natural processes, while others are emitted through human activities. Beginning in the late eighteenth century, human activities associated with the Industrial Revolution changed the composition of the atmosphere and, therefore, very likely influenced Earth's climate.

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat-trapping effects of GHGs, Earth's temperature would be approximately 86 degrees Fahrenheit

(°F) cooler (Riebeek 2010). However, emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of GHGs in the atmosphere beyond the level of naturally occurring concentrations.

The Global Carbon Project (2025) released an update of the global carbon budget for the year 2025. The projected atmospheric carbon dioxide ($CO_2$) concentration for 2025 was 425.7 parts per million (ppm), 53 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). The annual mean growth rate of atmospheric $CO_2$ has shown a steady increase, but has grown more slowly in the last decade (0.3 percent per year on average) compared to the previous decade (1.9 percent per year). The weakened land sink effect that resulted from a strong El Niño in 2024 recovered in 2025. Emissions from land use change, primarily deforestation and degradation fires, have decreased since their peak in the 1990s, partially offsetting growth in fossil fuel emissions (Global Carbon Project 2025).

#### 4.8.2.2 Greenhouse Gases

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. The following gases are principal contributors to human-induced global climate change:[1]

- $CO_2$
- Methane ($CH_4$)
- Nitrous oxide ($N_2O$)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride ($SF_6$)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere, particularly burning fossil fuels for electricity, heat, and transportation (USEPA 2026). These extra emissions increase GHG concentrations in the atmosphere and enhance the natural greenhouse effect. While GHGs produced by human activities include naturally occurring GHGs (e.g., $CO_2$, $CH_4$, and $N_2O$), some gases (e.g., HFCs, PFCs, and $SF_6$) are completely new to the atmosphere. Certain other gases (e.g., water vapor) are short lived in the atmosphere compared to these GHGs, which remain in the atmosphere for significant periods of time and contribute to long-term climate change. Water vapor is generally excluded from the list of GHGs because it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For purposes of this PEIR, the term "GHGs" will refer collectively to the six gases identified in the bulleted list provided above. The following discussion summarizes the characteristics of the six primary GHGs.

[1] The GHGs listed are consistent with the definition in Assembly Bill (AB) 32 (California Government Code, Section 38505), as discussed in this section.

### Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form as $CO_2$. Natural sources of $CO_2$ include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; decomposition of organic matter; and evaporation from the oceans. Human-caused sources of $CO_2$ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Earth maintains a natural carbon balance, and when concentrations of $CO_2$ are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding $CO_2$ to the atmosphere. Natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of human-made $CO_2$, and consequently, the gas is building up in the atmosphere. The concentration of $CO_2$ in the atmosphere has risen approximately 30 percent since the late 1800s.

### Methane

$CH_4$ is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of $CH_4$ include fires, geologic processes, and bacteria that produce $CH_4$ in various settings (most notably wetlands). Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (e.g., the burning of coal, oil, and natural gas). As with $CO_2$, the major removal process of atmospheric $CH_4$ (a chemical breakdown in the atmosphere) cannot keep pace with source emissions. Consequently, $CH_4$ concentrations in the atmosphere are increasing.

### Nitrous Oxide

$N_2O$ is produced naturally by various biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. $N_2O$ is also a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion sources emit $N_2O$. The quantity of $N_2O$ emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated $N_2O$ emissions in the state.

### Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone ($O_3$)-depleting substances regulated under the Montreal Protocol.[2] PFCs and $SF_6$ are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. No aluminum or magnesium production occurs in the State of California;

[2] The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the $O_3$ layer by phasing out the production of several groups of halogenated hydrocarbons that are believed to be responsible for $O_3$ depletion and are also potent GHGs.

however, rapid growth in the semiconductor industry, which is active in the state, has led to greater use of PFCs.

### Global Warming Potential

The GHGs described previously vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another GHG. GWP is based on several factors, including the relative effectiveness of a GHG in absorbing infrared radiation and the length of time that the GHG remains in the atmosphere (referred to as "atmospheric lifetime"). The GWP of each GHG is measured relative to $CO_2$, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of $CO_2$ over a specified time period. GHG emissions are typically measured in terms of metric tons[3] (MT) of $CO_2e$. For example, $N_2O$ is 298 times more potent at contributing to global warming than $CO_2$. Table 4.8-2, Global Warming Potential for Selected Greenhouse Gases, identifies the GWP for each relevant GHG.

**Table 4.8-2. Global Warming Potential for Selected Greenhouse Gases**

| Pollutant | Atmospheric Lifetime (Years) | GWP (100-Year)[2] |
|---|---|---|
| $CO_2$ | ~100[1] | 1 |
| $CH_4$ | 12 | 25 |
| $N_2O$ | 121 | 298 |

**Source:** CAPCOA 2022. Consistent with CalEEMod, Version 2022.1.

**Notes:** $CH_4$ = methane; $CO_2$ = carbon dioxide; GWP = global warming potential; $N_2O$ = nitrous oxide

[1] $CO_2$ has a variable atmospheric lifetime and cannot be readily approximated as a single number.

[2] The warming effects over a 100-year period relative to other GHGs.

## 4.8.2.3 Federal, State, and Local Greenhouse Gas Inventories

### United States Emissions

In 2022, the United States emitted approximately 6.3 billion metric tons of carbon dioxide equivalent (MT $CO_2e$). Emissions increased in 2022 by 1 percent (after accounting for sequestration from the land sector) compared to the previous year. The increase in total greenhouse gas emissions was driven largely by an increase in $CO_2$ emissions from fossil fuel combustion. In 2022, $CO_2$ emissions from fossil fuel combustion increased by 1 percent relative to the previous year. This increase in fossil fuel consumption emissions was from increased energy use, due in part to the continued rebound in economic activity after the height of the COVID-19 pandemic. Emissions in 2022, after accounting for sequestration, were 17 percent below 2005 levels (USEPA 2022).

[3] A metric ton is equal to approximately 1.1 tons.

### State of California Emissions

According to California's 2000–2022 GHG emissions inventory (CARB 2022a), California emitted 371.1 MMT $CO_2e$ in 2022, including emissions resulting from out-of-state electric generation. Sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The transportation sector remains the largest source of GHG emissions in the state. Direct emissions from vehicle tailpipes, off-road transportation sources, and intrastate aviation accounted for almost 40 percent of statewide emissions in 2022. Emissions from the electric power sector made up 16 percent of 2020 statewide GHG emissions. Although emissions in California have generally decreased since 2004, the 35.3 MMT $CO_2e$ decrease in emissions from 2019 to 2020 is likely due in large part to the impacts of the COVID-19 pandemic, like the federal emissions inventory (CARB 2022a).

### County of Monterey Emissions

As described in Section 4.8.1, Regulatory Setting, a community GHG emissions inventory has been completed as part of the County's ongoing effort of drafting a CCAAP (County of Monterey 2026). In 2019, community GHG emissions in the UMC were approximately 1,235,855 MT $CO_2e$. The highest contributor of GHG emissions was on-road transportation (39 percent of total emissions), followed by agriculture (32 percent), non-residential energy use (14 percent), and residential energy use (7 percent). The remaining 8 percent is attributable to solid waste, off-road vehicles and equipment, wastewater treatment, and water supply.

## 4.8.3 Method of Analysis

The analysis contained herein addresses potential impacts related to GHG emissions from a programmatic level and countywide approach, recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC will be facilitated by the HEU6 through identification and rezoning to encourage residential development. Individual projects will undergo project-specific review at the time of each development application. Where appropriate and possible, individual project sites are discussed.

GHG emissions modeling includes evaluation of the theoretical maximum buildout capacity of 12,497 housing units, consistent with the assumptions of the VMT analysis in Section 4.16, Transportation. However, as described in Chapter 3, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in the UMC. Therefore, while the analysis determination for significance finding is based on the theoretical maximum buildout capacity, a modeling scenario that assumes a reasonable capacity of 4,434 housing units is also modeled for comparison purposes as described below.

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results, of Appendix F, Air Quality Technical Memorandum. Construction of the theoretical maximum buildout of 12,497 residential units is estimated to result in average annual construction emissions of 12,256 MT $CO_2e$ per year between 2023 and 2031. In comparison, buildout of 4,434 residential units under the reasonable capacity scenario is estimated to result in average annual construction emissions of 4,484 MT $CO_2e$ per year between 2023 and 2031. Project operation emissions were also estimated using CalEEMod, except mobile emissions, which were estimated using CARB's Emissions Factor (EMFAC) model.

## 4.8.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on GHG emissions if it would:

- **Threshold 1:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Threshold 2:** Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

## 4.8.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to GHG emissions that could result from implementation of the project.

### 4.8.5.1 Threshold 1: Generation of Greenhouse Gas Emissions

**Threshold 1:** Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The County has not adopted a climate action plan that meets the requirements for tiering in accordance with the CEQA Guidelines, Section 15183.5. Additionally, the Monterey Bay Air Resources District has not adopted a GHG threshold. GHG analysis guidance published by the State of California, Monterey Bay Air Resources District, and City was reviewed and considered in determining an applicable standard for the Project. Section 3.2 of Appendix D of the 2022 Scoping Plan, Evaluating Plan-Level and Project-Level Alignment with the State's Climate Goals in CEQA GHG Analyses, outlines three approaches to evaluating GHG emissions under CEQA: 2022 Scoping Plan Consistency, Net-Zero Emissions, and consistency with a threshold adopted by an applicable air district or agency. As previously noted, an adopted threshold is not available. The remaining two 2022 Scoping Plan approaches are evaluated below, as well as a review of bright-line thresholds and service population or per-capita thresholds.

### Bright-Line Thresholds

Numeric thresholds adopted by other agencies were considered as an option, including a threshold of 1,100 MT $CO_2e$ (annual emissions) adopted by the Sacramento Metropolitan Air Quality Management District and referenced in the 2017 Scoping Plan (CARB 2017). These so-called bright-line thresholds[4] address the state's long-term emissions reduction goals by determining a screening level under which a project would not be considered to hinder the state's ability to meet long-term goals. Bright-line thresholds are typically intended to screen out smaller projects with relatively minimal emissions so that the vast majority (typically 90 percent) of total future development would be subject to mitigation or project features that would reduce GHG emissions compared to business as usual (BAU) emissions and consistency with GHG reduction goals (CAPCOA 2008). These thresholds were ultimately rejected for the Threshold 1 analysis because they do not specifically address the contribution of emissions in UMC to the current statewide AB 1279 goal.

### Service Population or Per-Capita Thresholds

Numeric thresholds based on service population (defined as residents and employees) or per-capita thresholds are also acceptable per the 2017 Scoping Plan. However, the 2017 Scoping Plan has been replaced by the 2022 Scoping Plan, which does not include a revised per-capita target.

### Net-Zero Anthropogenic Emissions

A screening level of zero increase in anthropogenic emissions for ongoing, annual operational emissions compared to existing conditions is consistent with the AMBAG methodology for the 2045 MTP/SCS. A project that does not generate a net increase in anthropogenic GHG emissions would also be consistent with the overall goal of the 2022 Scoping Plan, which outlines a path for statewide carbon neutrality. Appendix D of the 2022 Scoping Plan, Local Actions, acknowledges that net-zero GHG emissions can be an appropriate target for individual projects. However, the 2022 Scoping Plan does not require or prioritize the use of a net-zero threshold. Due to the nature of the project to accommodate new land use development to support planned growth, and because the design of future projects is unknown, it was determined that a site-specific net-zero standard was appropriate for this plan-level analysis.

### Project Attributes for Residential to Qualitatively Determine Consistency with the Scoping Plan

This 2022 Scoping Plan approach is the first state-recommended approach for determining whether a proposed residential development would align with the State's climate goals. The focus of the approach is to examine whether the project includes key project attributes that reduce operational

[4] A bright-line threshold is a numeric threshold that provides a clearly defined rule to determine whether emissions are significant or less than significant and does not vary based on the size of type of project.

GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan states that residential projects that have all of the key project attributes outlined in 2022 Scoping Plan Appendix D would accommodate growth in a manner consistent with state GHG reduction goals, specifically the attributes outlined in Table 3, Key Residential and Mixed-Use Project Attributes that Reduce GHGs. As outlined in Section 3.2.1 of the 2022 Scoping Plan, these project attributes are intended as a guide to help local jurisdictions qualitatively identify those residential projects that are clearly consistent with the State's climate goals, since these attributes address the largest sources of operational emissions for residential projects. In general, residential and mixed-use development projects that incorporate all of the key project attributes are aligned with the State's priority GHG reduction strategies for local climate action and with the State's climate and housing goals. As such, they are considered to be consistent with the 2022 Scoping Plan or other plans, policies, or regulations adopted for reducing GHGs; therefore, the GHG emissions associated with such projects may result in a less than significant GHG impact under CEQA.

As such, absent an adopted local plan or threshold, the appropriate threshold for determining the significance of project GHG emissions is whether development under the project would conflict with key project attributes outlined in the 2022 Scoping Plan. As such, an inventory of project GHG emissions is provided below for informational purposes, and the significance of project emissions is evaluated through consistency with the 2022 Scoping Plan under Threshold 2, along with a discussion of project consistency with the County's CCAAP.

## Impact Analysis

Mobile emissions typically account for the majority of land development emissions. As such, GHG emissions modeling includes evaluation of the theoretical maximum buildout capacity of 12,497 housing units, consistent with the assumptions of the VMT analysis in Section 4.16. However, as described in Chapter 3, development of 12,497 new housing units is neither supported by historical building trends nor would it align with market demand in the UMC. Therefore, as described below, a scenario that assumes more reasonable capacity is also modeled for comparison purposes.

### *Construction*

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. The project is a land use plan. It does not propose any specific construction projects; the details of future construction under the HEU6 are currently unknown. Therefore, maximum daily construction emissions were estimated using CalEEMod default assumptions for construction of 12,497 residential units for the theoretical maximum buildout capacity, although it is highly unlikely, and a more likely 4,434 residential units under the reasonable capacity scenario has also been modeled. Construction assumes the planning period from 2023 to 2031. The recommended default assumption of 600 tons of export material per acre and 1,190 tons of import per acre was used to estimate total earthwork and demolition export for

the project, based on the CalEEMod estimate for total project acreage (Ramboll 2023). Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results, of Appendix F. Construction of the theoretical maximum buildout of 12,497 residential units is estimated to result in average annual construction emissions of 12,256 MT $CO_2e$ per year between 2023 and 2031. In comparison, buildout of 4,434 residential units under the reasonable capacity scenario is estimated to result in average annual construction emissions of 4,484 MT $CO_2e$ per year between 2023 and 2031.

### *Operation*

Project operation emissions were also estimated using CalEEMod, except mobile emissions, which were estimated using CARB's EMFAC model, as described further below. During operation, BAU buildout[5] under the HEU6 would result in area and indirect emission sources from electricity and natural gas consumption, water and wastewater transport, and solid waste generation. GHG emissions from electricity consumed on-site by the project would be generated off site by the electric provider through fuel combustion. GHG emissions from water and wastewater transport would be indirect emissions resulting from the energy required to transport water from its source and to treat wastewater and transport it to its treated discharge point. The net increase in annual operational emissions from HEU6 buildout conditions is based on CalEEMod default energy use estimates for Central Coast Community Energy and natural gas from Pacific Gas & Electric. CalEEMod default assumptions include natural gas hearths for new residential units. Energy use estimates are conservative because CalEEMod assumes compliance with 2019 Title 24 energy efficiency standards, whereas residential development associated with the HEU6 would be required to comply with increasingly stringent Title 24 Standards, including the current 2025 standards. Operational GHG emissions from these sources associated with the net increase in residential units accommodated by the project are shown in Table 4.8-3, Estimated Theoretical Maximum Capacity Project-Related Operation Greenhouse Gas Emissions, based on 12,497 housing units, and Table 4.8-4, Estimated Reasonable Capacity Project-Related Operation Greenhouse Gas Emissions, based on 4,434 housing units except mobile emissions. Mobile emissions under the reasonable capacity scenario used VMT data based on the 4,910-unit scenario derived from a previous iteration of the traffic model. The reasonable capacity table is included for comparison purposes. The project impact analysis in this section is based on the theoretical maximum capacity of 12,497 units.

Development under the HEU6 would also generate mobile source emissions from motor vehicle trips. The project does not propose any specific future development projects; therefore, project-specific detail is not provided. The project's impact related to mobile emissions is based on its

[5] A BAU scenario is one that assumes no additional GHG reduction efforts beyond what have already been adopted and accounted for in CalEEMod. For example, CalEEMod estimates energy use based on 2019 consumption rates and projected 2025 Central Coast Community Energy emissions factors (CAPCOA 2022). It does not account for the 2025 Title 24 energy efficiency standards and future standards that have not yet been adopted.

impact on Monterey Countywide VMT data for existing (2023) and buildout (2031) conditions from Kimley-Horn (Appendix L, VMT Memorandum). The net change in mobile emissions from buildout of the HEU6 was estimated using CARB's EMFAC2025 (V2.1.0) model. EMFAC2025 V2.1.0 reflects federal actions to disapprove USEPA's actions to grant California waivers for several regulations in the model, including Advanced Clean Cars II, Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions (Warranty Phase 1), and Heavy-Duty Omnibus (Omnibus), although these actions are being contested by the State (CARB 2025).

**Table 4.8-3. Estimated Theoretical Maximum Capacity Project-Related Operation Greenhouse Gas Emissions**

| Emissions Source | Emissions (MT $CO_2e$) |
|---|---|
| Area and Refrigerants | 231 |
| Electricity | 7,808 |
| Natural Gas | 26,750 |
| Waste | 2,885 |
| Water | 1,210 |
| Mobile | 134 |
| **Total BAU Annual Operation Emissions** | **39,018** |

**Source:** CAPCOA 2022. Refer to Attachment 1 of Appendix F for model output.
**Notes:** BAU = business as usual; MT $CO_2e$ = metric tons of carbon dioxide equivalent

**Table 4.8-4. Estimated Reasonable Capacity Project-Related Operation Greenhouse Gas Emissions**

| Emissions Source | Emissions (MT $CO_2e$) |
|---|---|
| Area and Refrigerants | 82 |
| Electricity | 2,770 |
| Natural Gas | 9,491 |
| Waste | 1,024 |
| Water | 429 |
| Mobile | 89 |
| **Total BAU Annual Operation Emissions** | **13,885** |

**Source:** CAPCOA 2022. Refer to Attachment 1 of Appendix F for model output.
**Notes:** BAU = business as usual; MT $CO_2e$ = metric tons of carbon dioxide equivalent

### *Conclusion*

The significance of project GHG emissions is evaluated below through consistency with the 2022 Scoping Plan. As evaluated in detail below, given that the project would result in significant and unavoidable impacts related to agricultural resources and VMT, and is precluded by AB 130 from mandating building decarbonization, the project cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes. This impact would be significant.

## Significance of Impact

Potentially significant impact.

## Mitigation Measures

Residential projects must demonstrate consistency with the 2022 Scoping Plan Appendix D, Table 3, Key Residential and Mixed-Use Project Attributes that Reduce GHGs, as described in Mitigation Measure (MM-) GHG-OBJ-1 and MM-GHG-CONS-2 by incorporating GHG emissions reduction feature in project construction documents. MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 would also reduce impacts related to 2022 Scoping Plan consistency by reducing impacts to natural and working lands and VMT.

As described in greater detail under Threshold 2, MM-GHG-OBJ-1 and MM-GHG-CONS-2 both prioritize the provision of ample EV infrastructure and require that developments provide no more parking than the County's existing requirements. These measures would implement 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes to the extent feasible for the project, which balances state goals related to housing and GHG reduction, but is still subject to AB 130.

**MM-GHG-OBJ-1: Key Project Attributes Consistency.** Prior to approval of a grading permit for new development streamlining under the Objective Process, developers shall demonstrate consistency with key project attributes based on the 2022 Scoping Plan Appendix D, Key Residential and Mixed-Use Project Attributes that Reduce GHGs (Table 3 of the 2022 Scoping Plan Appendix D).[6] The development shall either ensure consistency with all of the following key project attributes:

- Provides electric vehicle charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval; and
- Does not provide parking beyond minimum required parking; and
- Results in no net loss of existing affordable housing.

Final project design shall incorporate the above design measures or an equivalent GHG emissions reduction feature in the construction of the residential units. The County of Monterey (County) shall ensure that these items are included in project construction documents.

[6] Available at https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf and above in Table 4.8-1.

**MM-GHG-CONS-2: Key Project Attributes Consistency.** Future residential developments that would streamline under the Consistency Process shall demonstrate consistency with key project attributes based on the 2022 Scoping Plan Appendix D, Key Residential and Mixed-Use Project Attributes that Reduce GHGs (Table 3 of the 2022 Scoping Plan Appendix D).[7] The development shall either ensure consistency with all of the following key project attributes:

- Provides electric vehicle charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval; and
- Does not provide parking beyond minimum required parking; and
- Results in no net loss of existing affordable housing.

Final project design shall incorporate the above design measures or an equivalent GHG emissions reduction feature in the construction of the residential units. The County shall ensure that these items are included in project construction documents.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

### 4.8.5.2 Threshold 2: Conflict with Applicable Plan

**Threshold 2:** Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

### Impact Analysis

As shown in Tables 4.8-3 and 4.8-4, achieving either the Regional Housing Needs Assessment (RHNA) target or theoretical buildout of new residential units under the HEU6 would result in a net increase in operational GHG emissions compared to existing conditions. However, the estimated GHG emissions in Tables 4.8-3 and 4.8-4 are conservative and do not take into account that many opportunity sites are near existing development, which may result in fewer mobile emissions associated with VMT. Additionally, development would be subject to increasingly strict building standards that would reduce operational GHG emissions. The HEU6 would accommodate the County's RHNA target consistent with state housing goals. Although the project would require amendments to the County's Local Coastal Program, 2010 General Plan, and Zoning Code to implement the HEU6, the project addresses projected housing needs to accommodate anticipated future growth, consistent with local and regional planning. Consequently, the project would not result in unplanned forecasted GHG emissions. The fundamental purpose of the HEU6 is to demonstrate how the County will accommodate the expected growth in housing needs over an 8-year

[7] Available at https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf and above in Table 4.8-1.

planning period to comply with both state housing law and the final RHNA plan. Potential conflicts from implementing the HEU6 with the key strategies of the 2022 Scoping Plan and Appendix D, Local Actions, to achieve statewide GHG emissions reduction targets, and the AMBAG MTP/SCS are addressed below.

### *2022 Scoping Plan*

The 2022 Scoping Plan outlines a path for achieving carbon neutrality in accordance with AB 1279. The 2022 Scoping Plan recommends that local governments prioritize transportation electrification, VMT reduction, and building decarbonization (CARB 2022b). Specifically, Appendix D, Local Actions, of the 2022 Scoping Plan outlines recommendations for local government action to be implemented at the plan level to facilitate 2022 Scoping Plan implementation. A key local action for the 2022 Scoping Plan implementation is the preparation and implementation of a local Climate Action Plan. As described previously, the County is currently preparing a CCAAP. However, the draft CCAAP has not been approved. Adoption is anticipated during the 2023–2031 planning period. As such, individual future projects may be evaluated for consistency with the County's CCAAP and would be required to comply with applicable CCAAP policies or regulations. However, because a local plan has not been adopted at this time to address the County's fair share of GHG reductions under AB 1279, the project is evaluated for potential conflicts with the 2022 Scoping Plan goals and strategies. The GHG reduction goals and strategies for local jurisdictions identified in the 2022 Scoping Plan Appendix D fall into three categories: Transportation Electrification, VMT Reduction, and Building Decarbonization.

Development projects accommodated under the HEU6 are required to adhere to the programs and regulations identified by the 2022 Scoping Plan and implemented by state, regional, and local agencies to achieve the statewide GHG reduction goals of AB 1279. Appendix D, Local Actions, of the 2022 Scoping Plan are not mandates for new development; however, these strategies represent the most applicable tool for evaluating project consistency with the 2022 Scoping Plan. Table 1 of the 2022 Scoping Plan Appendix D lists Priority GHG Reduction Strategies. The potential for the project to conflict with these strategies is discussed in Table 4.8-5, 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies.

**Table 4.8-5. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| **Transportation Electrification** | |
| Convert local government fleets to ZEVs and provide EV charging at public sites. | **Not Applicable/No Conflict.** This strategy is not applicable to the project, which would facilitate the development of residential development to meet the County's future housing needs. However, new developments facilitated under the project would be required to install EV supply equipment (EVSE) in accordance with Section 4.106.4 of the California Green Building Standards Code (CALGreen; 2025 or most recent). For instance, new one- and two-family dwellings and townhouses with attached private garages must install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each new dwelling unit. In addition, any non-residential (mixed-use) development that may be facilitated by the project would be required to install EVSE in accordance with Section 5.106.5.3 of CALGreen, depending on the number of parking spaces provided. Additionally, new multi-family parking facilities are required to equip 40 percent of the total number of parking spaces with low power Level 2 EV charging receptacles and 10 percent of the total number of parking spaces with Level 2 EV chargers in accordance with Section 4.106.4.2.2 of CALGreen. The development of new EV chargers would help support the County's conversion of fleets to ZEVs by providing additional charging stations. Additionally, the Monterey Bay Air Resources District has adopted the Monterey Bay Plug-in Electric Vehicle Readiness Plan to support development of EV infrastructure regionally (CEC 2022). Further, implementation of MM-GHG-OBJ-1 and MM-GHG-CONS-2 would require that all future developments associated with the HEU6 provide EVSE that, at a minimum, meets the most ambitious voluntary standard in CALGreen at the time of project approval. |
| Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans). | |
| **VMT Reduction** | |
| Reduce or eliminate minimum parking standards. | **Potential Conflict.** Changes to parking requirements can only be implemented through updates to the County Code and would apply to the entire UMC, which is beyond the HEU6's scope. However, the HEU6 does include some options to reduce parking below standards. Goal H-3 allows for adjusting parking standards for small developments below the Density Bonus law threshold when affordable units for the older adults or people with disabilities are provided. Goal H-5 allows for consideration of reduced parking as a development incentive to encourage the creation of affordable housing for special needs groups. Although the 2022 Scoping Plan encourages reducing parking requirements, this key project attribute could potentially conflict with the 2022 Scoping Plan priority to provide new EV charging stations. Therefore, MM-GHG-OBJ-1 and MM-GHG-CONS-2 both prioritize the provision of ample EV infrastructure and require that developments do not provide more parking than the County's existing requirements. As such, the project would potentially conflict with this 2022 Scoping Plan strategy. |
| Implement Complete Streets policies and investments, consistent with general plan circulation element requirements. | **No Conflict.** This strategy would be implemented by the County. Complete Streets are streets that are designed and operated to enable safe access for all users and for all modes of travel including non-motorized users and transit riders. Future development with 25 or more units associated with the project would require compliance with Sections 20.64.250 and 21.64.250 of the County Code, which establish requirements to reduce vehicle trips by ensuring that new developments, redevelopment, and expansion of existing developments contain |

**Table 4.8-5. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| | infrastructure and programs to reduce vehicle travel and encourage alternative modes of travel. For instance, these sections require developers of applicable developments to submit a Trip Reduction Checklist with measures such as providing ridesharing, installing bicycle amenities, and providing pedestrian facilities linking transit stops and common areas, as part of the permit application materials for the proposed applicable development. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. Further, future development associated with the project would be required to evaluate consistency with the County's 2010 General Plan policies related to alternative transportation, such as Circulation Element Policies C-2.6, C-3.5 C-4.3, C-4.5, C-6.5, C-9.2, C-9.3, and C-9.6, which support the development and use of alternative transportation infrastructure. |
| Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc. | **No Conflict.** Improving transit service frequencies, reducing fares, and creating bus priority lanes would be implemented by local transportation agencies. However, as described above, future development associated with the project would require compliance with Sections 20.64.250 and 21.64.250 of the County Code and applicable policies of the 2010 County's General Plan Circulation Element to support the development and use of alternative transportation infrastructure. This would allow the project to contribute its fair share to GHG reductions. |
| Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking. | **No Conflict.** This strategy would be implemented by the County. As described above, Sections 20.64.250 and 21.64.250 of the County Code require a Trip Reduction Checklist to be submitted as part of the permit application materials for future development with 25 or more units associated with the project. The Trip Reduction Checklist must include measures to reduce vehicle trips such as providing ridesharing, park-and-ride facilities, carpools, and vanpools. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. This would allow the project to contribute its fair share to GHG reductions. |
| Implement parking pricing or transportation demand management pricing strategies. | **Potential Conflict.** As described above, Sections 20.64.250 and 21.64.250 of the County Code require a Trip Reduction Checklist with transportation demand management measures to be submitted as part of the permit application materials for future development with 25 or more units associated with the project. Transportation demand management measures to be included in the Trip Reduction Checklist could include providing ridesharing, installing bicycle amenities, providing pedestrian facilities linking transit stops and common areas. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. This would allow the project to contribute its fair share to GHG reductions. Nevertheless, the project would not implement parking pricing or transportation demand management pricing strategies for all future development associated with the project; therefore, the project would potentially conflict with this 2022 Scoping Plan strategy. |

**Table 4.8-5. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood). | **No Conflict.** The HEU6 would accommodate additional housing adjacent to existing housing development. For example, Opportunity Sites 32 through 34 in the Central Salinas Valley Area Plan area and Opportunity Site 48 in the North County Coastal Land Use Plan area are near existing housing and schools. However, the sites are not necessarily near commercial or employment areas that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. For example, Opportunity Sites 40 and 45 are in an area with existing residential development in the Greater Monterey Peninsula Area Plan area, but not an existing commercial or employment center. Nevertheless, the project would amend the County's 2010 General Plan, Land Use Plans, Coastal Implementation Plans, and Zoning Ordinance to facilitate the development of higher density residential development. This would allow for more development in areas close to existing development and infrastructure to increase walkability and use of transit. |
| Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements). | **Potential Conflict.** The conversion of agricultural land as a result of the HEU6 is evaluated in Section 4.2, Agriculture and Forestry Resources, of the PEIR. As described therein, implementation of the project would result in the conversion of 0.16 percent of land identified as Important Farmland by the California Department of Conservation's Farming Mapping and Monitoring Program. In addition, buildout of the project would result in residential development on land that is currently zoned for uses that allow for agricultural activities, conservatively estimated as a loss of approximately 0.0003 percent of the total land zoned for agriculture in Monterey County. While these percentages are small, the impacts are considered to be potentially significant because the land would be permanently removed from the potential for agricultural production. Chapter 21.92 of the County Code provides Regulations to Mitigate for Development on Farmland, including the requirement for a Farmland Mitigation Plan for any conversion of agricultural use to a non-agricultural use. There is no important farmland located on opportunity sites in the coastal zone. The Farmland Mitigation shall include Farmland Conservation Easements or Farmland Deed Restrictions, in-lieu fees, or alternative and complementary mitigation. As evaluated in Section 4.2 of the Draft PEIR, the only way to fully avoid impacts to important farmland and agriculturally zoned land would be to eliminate all opportunity sites on these lands. However, doing so would substantially reduce the flexibility for County decision-makers to meet regional housing needs and specific affordability targets. Therefore, impacts to agricultural resources would remain significant and unavoidable.<br>MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11 would require protective measures for sensitive plants, wildlife, vegetation communities, jurisdictional aquatic resources, and other habitat to avoid impacts to sensitive biological resources from future development. As described further in Section 4.4, Biological Resources, of the Draft PEIR, implementation of these mitigation measures would mitigate all direct and indirect permanent and temporary impacts to biological resources to a less than significant level. Further, the County is in the process of updating its 2010 General Plan Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network. |

**Table 4.8-5. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| | It should also be noted that the HEU6 includes Policy H-3.2 "Place first priority on planning for residential growth in Community Areas near existing or planned infrastructure to ensure conservation of the County's agricultural and natural resources." Nevertheless, the significant and unavoidable impact on agricultural lands results in a potential conflict with this strategy. |
| **Building Decarbonization** | |
| Adopt all-electric new construction reach codes for residential and commercial uses. | **Partially Met.** AB 130 limits the County's ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP is not yet adopted, and the details of potential future restrictions are unknown. As such, the AB 130 limitation is assumed to be in place for the entirety of the HEU6 planning cycle. However, the goal of this strategy is to increase the use of electricity and reduce fossil fuel emissions. The primary energy provider for Monterey County, including the UMC, is Central Coast Community Energy (3CE), which has to comply with state renewable energy portfolio targets, including receiving 60 percent renewable energy by 2030 and zero carbon sources by 2045. Further, 3CE procures electricity from clean and renewable energy sources such as wind, solar, and geothermal and purchases electricity from the grid to meet the energy demand. In addition, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency. The 2025 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen includes use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities.<br>The County Code includes requirements to reduce energy use, including low-flow plumbing fixtures (Chapter 18.44, Residential and Commercial Water Conservation Measures) and renewable energy generation requirements for new structures greater than 25,000 square feet (Section 18.11.040, Renewable Energy Generation Requirements). In addition, the County's 2010 General Plan includes Goal OS-9 to promote efficient energy use and Policies OS-9.1 through OS-9.8 to support this strategy.<br>Also consistent with reducing energy use from reducing water usage, Chapter 16.63 (Standards for Landscaping) of the County Code requires drought-tolerant plants and other water conservation and energy efficiency measures for all landscapes. Project operations and waste management methods would be consistent with waste reduction and diversion requirements, such as Chapter 10.45 (Organic Waste Disposal Reduction) of the County Code and CALGreen construction and demolition recycling requirements.<br>The County has not adopted all-electric new construction standards so this analysis identifies a partial conflict. If permissible under AB 130 and as a result of future CCAAP measures, the County may consider such requirements, which, if adopted, would result in a no conflict determination. |

**Table 4.8-5. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers). | **No Conflict.** This strategy would apply to existing buildings. Future development associated with the project may include renovations and expansion of existing development. Future development, redevelopment, and expansions would be required to comply with Title 24 energy standards for energy efficiency. The County Code requires reduced energy use, including low-flow plumbing fixtures (Chapter 18.44, Residential and Commercial Water Conservation Measures) and renewable energy generation r for new structures greater than 25,000 square feet (Section 18.11.040, Renewable Energy Generation Requirements). In addition, the County's 2010 General Plan includes Goal OS-9 to promote efficient energy use and Policies OS-9.1 through OS-9.8 to support this strategy. |
| Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances. | **No Conflict.** As described above, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency. The 2025 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen standards include electric heat pump and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities.<br>In addition, the primary energy provider for Monterey County is 3CE, which has to comply with state renewable energy portfolio targets, including receiving 60 percent renewable energy by 2030 and zero carbon sources by 2045. 3CE procures electricity from clean and renewable energy sources such as wind, solar, and geothermal. 3CE also purchases electricity from the grid to meet the energy demand. |
| Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing). | **No Conflict.** The proposed HEU6 would facilitate the development of residential development to meet the County's future housing needs. It would not conflict with future deployment of renewable energy production, distribution, and energy storage on privately owned land uses. As described above, future development associated with the project would be required to comply with the most recent Title 24 energy standards for renewable energy. For instance, all new single-family residential and multi-family residential buildings up to three habitable stories are required to install photovoltaic (PV) solar panels to meet energy demand. Therefore, all new developments associated with the project would require PV solar panels for renewable energy production and would not conflict with this strategy. This would allow the project to contribute its fair share to GHG reductions. |
| Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings). | **Not Applicable.** This strategy is not applicable to the project, which would facilitate the development of private residential development to meet the County's future housing needs. The project would not facilitate the development of new public facilities, such as municipal buildings. |

**Source:** CARB 2022b.

**Notes:** EV = electric vehicle; ZEV = zero emissions vehicle

In addition to the Priority GHG Reduction Strategies, Table 3 of the 2022 Scoping Plan Appendix D identifies Key Residential and Mixed-Use Project Attributes that Reduce GHGs as a guide to identify if a development is clearly consistent with the State's climate goals. Table 4.8-6, 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes That Reduce Greenhouse Gases, evaluates whether future developments associated with the project would be able to meet the Key Residential and Mixed-Use Project Attributes that Reduce GHGs identified in Table 3 of the 2022 Scoping Plan Appendix D.

**Table 4.8-6. 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes That Reduce Greenhouse Gases**

| Strategy/Action | Potential Conflicts |
|---|---|
| **Transportation Electrification** | |
| Provides EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in CALGreen at the time of project approval | Met. This would be required of future development associated with the project (refer to MM-GHG-OBJ-1 and MM-GHG-CONS-2). |
| **VMT Reduction** | |
| Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer) | **Partially Met.** The proposed HEU6 would accommodate additional housing adjacent to the existing housing development. However, although opportunity sites are near existing development, not all sites are necessarily near existing urban uses that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. Nevertheless, the project would amend the Local Coastal Plan, 2010 General Plan, and Zoning Ordinance to facilitate the development of mixed-use and higher-density residential development and would allow for more development in areas close to existing development and infrastructure to increase walkability and use of transit. Identification of opportunity sites prioritized sites presently served by existing utilities and essential public services. |
| Does not result in the loss or conversion of natural and working lands | **Partially Met.** As described in Table 4.8-5, the conversion of agricultural land as a result of the project would result in significant and unavoidable impacts to agricultural land (refer to Section 4.2, Agriculture and Forestry Resources, of the Draft PEIR). However, Chapter 21.92 of the County Code provides Regulations to Mitigate for Development on Farmland, including the requirement for a Farmland Mitigation Plan for any conversion of agricultural use to a non-agricultural use. There is no important farmland located on opportunity sites in the coastal zone. The Farmland Mitigation shall include Farmland Conservation Easements or Farmland Deed Restrictions, in-lieu fees, or alternative and complementary mitigation. In addition, the County is in the process of updating its 2010 General Plan Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network. Further, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11 would require protective measures for sensitive plants, wildlife, vegetation communities, jurisdictional aquatic resources, and other habitat to avoid impacts to sensitive biological resources from future development. As described further in Section 4.4, Biological Resources, of the Draft PEIR, implementation of these mitigation measures would mitigate all direct and indirect permanent and temporary impacts to biological resources to a less than significant level. |

**Table 4.8-6. 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes That Reduce Greenhouse Gases**

| Strategy/Action | Potential Conflicts |
|---|---|
| Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's SCS | **Met.** The proposed zoning for all opportunity sites is HDR/25 or HDR/30 (High Density Residential at 25 or 30 dwelling units per acre) except Site 51, which is planned as Mixed-Use Zoning. Site 51 is within 0.5 mile of existing transit stops. In fact, only five of the 56 opportunity sites included in the project are not within 0.5 mile of existing transit stops. These sites, however, would all consist of transit-supportive densities (minimum of 20 residential dwelling units per acre). |
| Reduces parking requirements by:<br>• Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or<br>• Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or<br>• For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit | **Partially Met.** Changes to parking requirements can only be implemented through updates to the County's Code of Ordinances and would apply to the entire UMC, which is beyond the HEU6's scope. However, the HEU6 does include some options to reduce parking below standards. Goal H-3 allows for adjusting parking standards for small developments below the Density Bonus law threshold when affordable units for the older adults or people with disabilities are provided. Goal H-5 allows for consideration of reduced parking as a development incentive to encourage the creation of affordable housing for special needs groups. Although the 2022 Scoping Plan encourages reducing parking requirements, this key project attribute could potentially conflict with the 2022 Scoping Plan priority to provide new EV charging stations. Therefore, MM-GHG-OBJ-1 and MM-GHG-CONS-2 prioritize the provision of ample EV infrastructure and require that developments do not provide more parking than the County's existing requirements. |
| At least 20 percent of units included are affordable to lower-income residents | **Met.** The project identifies sites for capacity of up to 999 units in the Extremely Low/Very Low Income category and 726 units in the Low Income category in opportunity sites. This represents 39 percent of the reasonable capacity total of 4,434 units planned for under the project in opportunity sites. Therefore, the project provides opportunity for at least 20 percent of total units included under the HEU6 to be affordable to lower-income residents. |
| Results in no net loss of existing affordable units | **Met.** This would be required of future development associated with the project (refer to MM-GHG-OBJ-1 and GHG-CONS-2). In addition, the proposed HEU6 identifies sites for capacity of up to 999 units in the Extremely Low/Very Low Income category and 726 units in the Low Income category. Further, the project includes housing policies and programs to facilitate the development of new units and preserve existing housing for residents at all income levels. |
| **Building Decarbonization** | |
| Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking | **Partially Met.** AB 130 limits the County's ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. As such, this limitation would be in place for the entirety of the HEU planning cycle. However, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency, which include increasingly stringent requirements on the use of natural gas. The 2025 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen includes the use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities. The County has not adopted all-electric new construction standards so this analysis identifies a partial conflict. If permissible under AB 130 and as a result of future CCAAP measures, the County may consider such requirements, which, if adopted, would result in a no conflict determination. |

**Source:** CARB 2022b.

### *Transportation Electrification*

The provision of EV charging infrastructure is a project-specific design requirement. While EV charging infrastructure is required for new construction under CALGreen, additional requirements that meet the most ambitious voluntary standards in CALGreen may be incorporated into the County's Zoning Code or CCAAP. Unless and until this design requirement is codified, MM-GHG-OBJ-2 and MM-GHG-CONS-2 would require that all future developments associated with the HEU6 provide EVSE that, at minimum, meets the most ambitious voluntary standard in CALGreen at the time of project approval. This would allow the project to contribute its fair share to GHG reductions. Additionally, the County has adopted the Zero Emissions Shared Mobility Study to identify innovative, accessible, and sustainable transportation options, especially for residents in low income, rural, and historically underserved communities. This effort aims to address transportation gaps by exploring shared zero-emissions mobility solutions, such as e-bikesharing, ridesharing with EVs, car or van pooling, among others, that are reliable, affordable, and non-polluting. The project would not conflict with this County effort.

### *Vehicle Miles Traveled Reduction*

Increased housing availability is a key focus of the 2022 Scoping Plan Appendix D. However, the focus of the 2022 Scoping Plan as it relates to housing is the opportunity for land use plans to eliminate barriers to infill development, such that meeting the ongoing need for additional housing is integrated with climate goals.[8] For instance, in 2022 Scoping Plan Appendix D, CARB states, "In many cases, land use strategies that support more compact development in infill areas, particularly those already displaying efficient resident travel patterns, have the greatest potential to reduce emissions while also reducing combined housing and transportation costs for Californians and infrastructure costs for local governments due to avoided new roads, public schools, and other sprawl supporting infrastructure. Infill housing development alleviates pressure to develop on the urban periphery, preserving natural and working lands and areas often at risk of wildfire." However, the HEU6 must balance the need for infill development with the State's requirements for Affirmatively Furthering Fair Housing, which aims to combat housing discrimination, eliminate racial bias, undo historic patterns of segregation, and lift barriers that restrict access to foster inclusive communities and achieve racial equity, fair housing choice, and opportunity for all Californians. Additionally, the UMC is not urbanized, and there are not enough existing opportunities for infill development to meet RHNA targets. As described in Tables 4.8-5 and 4.8-6, while the proposed HEU6 would accommodate additional housing adjacent to existing housing development, the sites are not necessarily near commercial or employment areas that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. The site selection process for HEU6 prioritized a site near existing development consistent with the State's infill priorities, but the project cannot demonstrate that all

[8] The 2022 Scoping Plan prioritizes "more compact, transportation-efficient development in infill areas and increasing transportation choices with the goal of reducing VMT" to reduce demand for transportation fuel, require less energy for buildings, and help to conserve natural and working lands that sequester carbon (CARB 2022b).

future development facilitated by the HEU6 would meet the 2022 Scoping Plan Appendix D key project attributes related to infill development.

The recommended target in the 2022 Scoping Plan Appendix D related to VMT is to reduce VMT per capita by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. The Draft Greenhouse Gas Emissions Inventory Report conducted for the County CCAAP calculated an annual VMT of 1,050,848,408 and a population of approximately 106,197 for the UMC in 2019, resulting in a daily VMT per capita of approximately 27 miles (County of Monterey 2026). The VMT Memorandum for the project determined that project VMT per capita would be 20.9 miles, and 31.7 miles per employee in 2031 (Appendix L) under the theoretical maximum buildout capacity of 12,497 housing units. VMT would be reduced compared to 21.5 VMT/capita and 30.4 VMT/employee estimated for the year 2031 without project implementation. However, VMT per capita would not achieve the 30 percent reduction metric recommended by the 2022 Scoping Plan. Project VMT would also exceed the applicable Governor's Office of Planning and Research VMT guidelines, as outlined in the VMT Memorandum (Appendix L). As such, the VMT Memorandum determined the impacts related to VMT would be significant. It therefore recommended VMT-reducing design principles such as transit-oriented development, and transportation demand management measures such as improved bicycle facilities. It should be noted that most of the housing units accommodated by the HEU6 would be within 0.5 mile of bicycle and/or transit facilities. However, the quality of these bicycle and transit facilities is often poor, with limited networks, connections, and hours of operation, as well as infrequent headways for transit service. Further, the effect of planned VMT-reducing design principles and future project-specific design features cannot be determined at the programmatic level. Consequently, the project's impact related to VMT would be significant and unavoidable (Appendix J). As such, the HEU6 would potentially conflict with 2022 Scoping Plan priorities related to infill development and VMT reduction.

#### *Building Decarbonization*

The use of electric appliances is a project-specific design requirement. The use of all-electric appliances may be incorporated into future applicable local or state regulations; however, as described in Table 4.8-5, AB 130 limits the County's ability to adopt a local decarbonization ordinance during the HEU6 planning cycle. The 2025 CALGreen standards include the use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities. Further, as described in Table 4.8-5, future development would be required to incorporate water conservation and renewable energy measures in accordance with County Code, Chapter 18.44, Residential and Commercial Water Conservation Measures, and Section 18.11.040, Renewable Energy Generation Requirements. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP

is not yet adopted, and the details of potential future restrictions are unknown. If adopted, applicable natural gas regulations for CCAAP consistency would result in decarbonization efforts consistent with 2022 Scoping Plan priorities. However, because a building decarbonization mandate cannot be demonstrated to be implemented during the HEU6 planning cycle, there is a potential conflict with the 2022 Scoping Plan priorities related to building decarbonization.

#### *Summary*

Given that the project would result in significant and unavoidable impacts related to agricultural resources and VMT, and is precluded by AB 130 from mandating building decarbonization, the project cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes. Alternatively, the 2022 Scoping Plan notes that developments that result in net-zero GHG emissions would be considered to have a less than significant impact related to GHG emissions. However, this cannot be demonstrated at the programmatic level.

Until CARB's key project attributes are codified, future residential development under the HEU6 would need to demonstrate either no conflicts with the 2022 Scoping Plan key project attributes or net-zero GHG emissions to determine a less than significant impact related to GHG emissions. Since the project cannot demonstrate no conflicts with all 2022 Scoping Plan key project attributes or net-zero GHG emissions, the project's impact related to GHG emissions and GHG plan consistency would be potentially significant.

#### *AMBAG MTP/SCS*

As described in Section 4.8.1.3, the AMBAG 2045 MTP/SCS is a regional growth management strategy that identifies improvements to the region's multimodal transportation system and outlines the region's plan for integrating the transportation network in an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands while reducing GHG emissions. In particular, the SCS demonstrates the land use and transportation measures that will be used to meet the region's greenhouse gas emissions reduction targets established by CARB, a 3 percent per-capita reduction by 2020 from passenger vehicles and a 6 percent per-capita reduction by 2035 through land use and transportation planning, compared to 2005 GHG emissions. Therefore, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with various transportation and housing choices, while reducing automobile use.

The 2045 MTP/SCS demonstrates that the Monterey Bay region will meet these targets by:

1. focusing housing and employment growth in urbanized areas;
2. protecting sensitive habitat and open space;

3. investing in a transportation system that provides residents, workers, and visitors with transportation options that are more effective and diverse; and
4. encouraging job growth in communities that are currently job poor as well as planning for new housing in communities that are currently job rich help to address the jobs/housing imbalance in the region and reduce VMT.

The project's potential to conflict with these strategies is discussed in Table 4.8-7, 2045 MTP/SCS Strategies.

**Table 4.8-7. 2045 MTP/SCS Strategies**

| Strategy | Potential Conflicts |
|---|---|
| Focusing housing and employment growth in urbanized areas. | **Met.** The purpose of this strategy is to reduce VMT and associated GHG emissions by siting housing in proximity to complementary land uses and employment centers, which could encourage the use of alternative transportation methods such as transit, walking, or biking, or would result in shorter vehicle trips. While this analysis addresses the theoretical maximum buildout capacity of 12,497 housing units, this is highly unlikely and not supported by historical building trends or market demands. The proposed opportunity sites would be developed with a higher density, and the majority of sites are surrounded by existing development. In addition, the majority of sites are within 0.5 mile of a transit stop and within 0.5 mile of bicycle facilities. As such, buildout of the project would provide residences in proximity to alternative transportation services. Future development facilitated by the project with 25 or more units would require compliance with Sections 20.64.250 and 21.64.250 of the County Code, which establish requirements to reduce vehicle trips by ensuring that new developments, redevelopment, and expansion of existing developments contain infrastructure and programs to reduce vehicle travel and encourage alternative modes of travel. Additionally, future development associated with the project would be consistent with the County's 2010 General Plan Circulation Element policies to support the development and use of alternative transportation infrastructure. Furthermore, the HEU6 includes Policies H-1.C, H-2.G, H-3.8, and H-5.B, which support the development of transit-oriented development and urban infill sites. Therefore, the project would not conflict with this strategy of the 2045 MTP/SCS. |
| Protecting sensitive habitat and open space. | **Met.** As described in Table 4.8-5, the conversion of agricultural land as a result of the project would result in significant and unavoidable impacts to agricultural land (refer to Section 4.2, Agriculture and Forestry Resources, of the Draft PEIR). However, Chapter 21.92 of the County Code provides Regulations to Mitigate For Development on Farmland, including the requirement for a Farmland Mitigation Plan for any conversion of agricultural use to a non-agricultural use. There is no important farmland located on opportunity sites in the coastal zone. The Farmland Mitigation shall include Farmland Conservation Easements or Farmland Deed Restrictions, in-lieu fees, or alternative and complementary mitigation to the satisfaction of the Agricultural Advisory Committee. In addition, the County is in the process of updating its 2010 General Plan Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network. The HEU6 includes Policy H-3.2 to "Place first priority on planning for residential growth in Community Areas near existing or planned infrastructure to ensure conservation of the County's agricultural and natural resources." Further, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11 would require protective measures for sensitive plants, wildlife, vegetation communities, jurisdictional aquatic resources, and other habitat to avoid impacts to sensitive biological resources. HEU6 also proposes a split-zone approach for 14 opportunity sites (Opportunity Sites 10 through 15, 38, 43 through 47, 52, and 56). This approach protects sensitive habitat by limiting development in constrained portions of the sites, while still allowing residential development to occur on a portion of these sites. Therefore, with implementation of these mitigation measures, and the proposed split-zone approach, the project would not conflict with the strategy to protect sensitive habitat and open space. |

**Table 4.8-7. 2045 MTP/SCS Strategies**

| Strategy | Potential Conflicts |
|---|---|
| Invest in a transportation system that provides residents, workers and visitors with transportation options that are more effective and diverse. | **Met.** The project would comply with this strategy of the 2045 MTP/SCS since it would be consistent with the County's 2010 General Plan Circulation Element policies and would be required to comply with Section 21.64.250 of the County Code. As described above, this section of the County Code requires development with 25 or more units to prepare and implement a Trip Reduction Checklist with measures to reduce vehicle trips, such as providing ridesharing, park-and-ride facilities, carpools, and vanpools. Additionally, the County would continue to support the expansion of alternative transportation opportunities through CIP investments and partnerships with the Transportation Agency for Monterey County and AMBAG, such as the opportunities outlined in the Monterey County Zero Emissions Shared Mobility Study. Therefore, the project would not conflict with this strategy. |
| Encourage job growth in communities that are currently job poor as well as planning for new housing in communities that are currently job rich help to address the jobs/housing imbalance in the region and reduce VMT. | **Met.** The HEU6 includes Goal H-3 to "Provide suitable sites for housing development that can accommodate a range of housing by type, size, location, price, and tenure that achieves an optimal jobs/housing balance, conserves resources, and promotes efficient use of public services and infrastructure." Additionally, Policies H-3.7, H-3.8, and H-3.9 support Goal H-3 to provide housing near and proportional to jobs. As outlined in Appendix B to HEU6, Affirmatively Furthering Fair Housing, employment opportunities are available within a 45-minute drive of all opportunity sites, although the number of jobs does not exceed 115,000 for any site. Five opportunity sites in the Central Salinas Valley Area are in areas with 25,000–100,000 jobs within a 45-minute transit commute. Therefore, the project would not conflict with this strategy of the 2045 MTP/SCS. |

The project would not conflict with the strategies for reducing GHG emissions identified in the 2045 MTP/SCS. It should also be noted that the 2045 MTP/SCS includes the Sixth Cycle RHNA for the AMBAG tri-county region, which consists of 33,274 units. Therefore, the HEU6 is consistent with the assumptions included in the 2045 MTP/SCS.

### *Draft CCAAP*

A Draft CCAAP has been published, but the CCAAP has not been adopted by the County. Strategies to reduce GHG emissions include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation, including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. The CCAAP also includes actions for protecting natural and working lands, including urban forests and green spaces in developed lands. The CCAAP focuses on actions that the County will take, rather than prescribing project features for future development. For example, implementation actions include future adoption of an electrification ordinance, coordination with other jurisdictions to expand alternative transportation facilities, and updates to the County's Water Conservation Ordinance. Future development would be required to comply with any applicable standards and regulations adopted by the County for CCAAP implementation. Therefore, the HEU6 is not anticipated to conflict with the CCAAP.

### *Summary*

Given that the project would result in significant and unavoidable impacts related to agricultural resources and VMT, and may be precluded by AB 130 from mandating building decarbonization, the

project cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes. The project's impact related to GHG emissions and GHG plan consistency would be potentially significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Implementation of MM-GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5 and MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 would result in implementation of key attributes outlined in 2022 Scoping Plan Appendix D to the extent feasible.

Similar to criteria air pollutant mitigation, as discussed in Section 4.3.5.2, AB 130 limits the County's ability to enact more restrictive standards for residential development to require implementation of 2022 Scoping Plan key design features, including building decarbonization, Additionally, there are not enough sites available in the UMC that meet the 2022 Scoping Plan standards for infill and natural/working land requirements and also accommodate sufficient housing under the RHNA. MM-GHG-OBJ-1 and MM-GHG-CONS-2 include project design features based on the 2022 Scoping Plan Appendix D, Key Residential and Mixed-Use Project Attributes that Reduce GHGs (Table 3 of the 2022 Scoping Plan Appendix D). These features do not exceed the voluntary building standards that are codified under the California Green Building Standards Code and therefore do not put additional limitations on residential development that would conflict with AB 130.

However, not all future developments associated with the HEU6 would be able to individually demonstrate consistency with the key project attributes for infill sites surrounded by urban uses, no loss or conversion of natural and working lands, at least 20 percent affordable units, transit-supportive densities, and no use of natural gas. It would be infeasible to limit future residential development to sites that meet these criteria while also providing housing consistent with housing targets. However, it should be noted that although not all individual sites may achieve the 20 percent affordable unit target, the project as a whole plans for 39 percent of the opportunity site capacity to be affordable for low income residents. In addition, changes to parking requirements can only be implemented through updates to the County Code. Such changes would apply to all development in the UMC[9], not only the potential development areas identified in the HEU6. As such, these requirements would be beyond the HEU6's scope.

[9] Opportunity Site 53 is in the City of Marina. Consequently, the County Code would not apply.

Further, although the 2022 Scoping Plan encourages reducing parking requirements, this could potentially conflict with the key project attribute to provide new EV charging stations. MM-GHG-OBJ-1 and GHG-CONS-2 meet this key project attribute to the extent feasible by prioritizing the provision of ample EV infrastructure and requiring that developments do not provide more parking than the County's existing requirements. MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11, and MM-TRA-OBJ-1 would also reduce impacts related to 2022 Scoping Plan consistency by reducing impacts to natural and working lands and VMT. However, impacts related to agricultural land and VMT would remain significant and unavoidable. Once adopted, the CCAAP would include additional actions that reduce GHG emissions in the UMC, but the timing extent of future residential development requirements is currently unknown.

Therefore, MM-GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 require implementation of the 2022 Scoping Plan key attributes to the extent feasible, but individual projects would potentially result in conflicts related to agricultural resources, VMT, and building decarbonization.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

## 4.8.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to GHG emissions that could result from implementation of the project.

### 4.8.6.1 Cumulative Threshold 1: Generation of Greenhouse Gas Emissions

The geographic scope of consideration for GHG emissions is on a global scale because such emissions contribute, on a cumulative basis, to global climate change. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions, on a global basis. By nature, GHG evaluations are a cumulative study. The project is inherently cumulative, as it considers cumulative development that could occur in the planning area over a defined time frame of 2023–2031. As described in Section 4.8.5, Project Impacts and Mitigation, implementation of the project would result in potentially significant GHG emissions because it cannot be demonstrated that future development would implement all applicable reduction strategies in the 2022 Scoping Plan.

MM-GHG-OBJ-1, MM-GHG-CONS-2, and MM-TRA-OBJ-1 would reduce GHG emissions compared to BAU conditions. However, the County cannot require implementation of all applicable 2022 Scoping Plan GHG-reducing features without compromising the key purpose of the project to provide opportunities for much-needed housing in the UMC, consistent with other state mandates. While implementation of mitigation measures would reduce the project's incremental contribution to the cumulative impact, the project would nevertheless have a cumulatively considerable contribution to a significant cumulative GHG impact.

### Significance of Impact

Potentially significant impact.

### Mitigation

Refer to MM-GHG-OBJ-1, MM-GHG-CONS-2, and MM-TRA-OBJ-1.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.8.6.2 Cumulative Threshold 2: Conflict with Applicable Plan

The 2022 Scoping Plan and AMBAG 2045 MTP/SCS are the applicable cumulative plans for reducing GHG emissions. As discussed above, the Project is consistent with regional goals of the AMBAG 2045 MTP/SCS. However, the project cannot demonstrate that it would not conflict with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes. The project's impact related to GHG emissions and GHG plan consistency would be cumulatively considerable. MM-GHG-OBJ-1 and MM-GHG-CONS-2 would reduce impacts to the extent feasible, but not to a less than cumulatively considerable level.

### Significance of Impact

Potentially significant impact.

### Mitigation

Refer to MM-GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

## 4.8.7 Conclusion

Implementation of the project would result in a potentially significant net increase in GHG emissions. Implementation of MM-GHG-OBJ-1 and MM-GHG-CONS-2 would reduce GHG emissions compared to BAU conditions. However, the County cannot require implementation of all applicable 2022 Scoping Plan GHG-reducing features without compromising the key purpose of the project: to provide opportunities for much-needed housing in Monterey County, consistent with other state mandates. Impacts related to GHG emissions and consistency with applicable climate plans would be significant and unavoidable and require a Statement of Overriding Considerations pursuant to CEQA Guidelines, Section 15093(a)–(c).

# 4.9 Hazards and Hazardous Materials

This section evaluates the potential for impacts related to hazards and hazardous materials resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts related to upset or accident conditions involving the routine transport, use, or disposal of hazardous materials, release of hazardous materials into the environment, and the emissions or handling of potentially hazardous materials in proximity to schools, as well as airport-related hazards. Refer to Section 4.19, Wildfire, for analysis regarding wildfire and related hazards.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.9.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address hazards and hazardous materials.

### 4.9.1.1 Federal

#### Resource Conservation and Recovery Act

Federal hazardous waste laws are largely promulgated under the Resource Conservation and Recovery Act (RCRA) (Code of Federal Regulations [CFR], Title 40, Part 260), as amended by the Hazardous and Solid Waste Amendments of 1984 (which are primarily intended to prevent releases from leaking underground storage tanks). These laws provide for the "cradle to grave" regulation of hazardous wastes. Specifically, under the RCRA, any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the

point of generation until it is recycled, reused, or disposed of. The U.S. Environmental Protection Agency (USEPA) has the primary responsibility for implementing the RCRA, although individual states can obtain authorization to implement some or all RCRA provisions.

### U.S. Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation Hazardous Materials Regulations (49 CFR 100–185) cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance) would apply to goods movement to and from the project area and surrounding uses.

The following administrations share enforcement of these regulations under delegations from the Secretary of the U.S. Department of Transportation:

- Research and Special Programs Administration is responsible for container manufacturers, reconditioners, and retesters and shares authority over shippers of hazardous materials.
- Federal Highway Administration enforces all regulations pertaining to motor carriers.
- Federal Railroad Administration enforces all regulations pertaining to rail carriers.
- Federal Aviation Administration (FAA) enforces all regulations pertaining to air carriers.
- U.S. Coast Guard enforces all regulations pertaining to shipments by water.

### Comprehensive Environmental Response, Compensation, and Liability Act

The 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to CERCLA are limited to sites on the National Priorities List for cleanup activities, with listings based on the USEPA's Hazard Ranking System. The Hazard Ranking System is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of the hazardous materials release and the potential to affect people or environmental resources. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986, as outlined below.

### Superfund Amendments and Reauthorization Act

SARA is primarily intended to address the emergency management of accidental releases and to establish state and local emergency planning committees responsible for collecting hazardous materials inventory, handling, and transportation data. Specifically, under SARA Title III, a Nationwide Emergency Planning and Response Program established reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic

substances as defined under federal laws. SARA Title III also requires each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when significant quantities of hazardous or acutely toxic substances are stored or handled at a facility. This data is made available to the community at large under the "right-to-know" provision, with SARA also requiring annual reporting of continuous emissions and accidental releases of specified compounds.

### Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act of 1986 was created to help communities plan for emergencies involving hazardous substances. The act establishes requirements for federal, state, and local governments, Native American Tribes, and industry regarding emergency planning and reporting on hazardous and toxic chemicals. There are four major provisions of the act: Emergency Planning (Sections 301–303); Emergency Release Notification (Section 304); Hazardous Chemical Storage Reporting (Sections 311–312); Toxic Chemical Release Inventory (Section 313); and the Clean Air Act Risk Management Plan Regulations (Clean Air Act Section 112[r]).

### Clean Water Act/Spill Prevention, Control, and Countermeasure Rule

The Clean Water Act (CWA) (33 USC 1251 et seq., formerly the Federal Water Pollution Control Act of 1972) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. As part of the CWA, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in 40 CFR Part 112, which is often referred to as the "SPCC Rule" because it requires facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons and, because of its location, the facility could reasonably be expected to discharge oil into or upon the "navigable waters" of the United States.

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include 40 CFR Part 1(D) (Water Projects) and 40 CFR Part 1(I) (Solid Wastes). Further, 40 CFR Part 1(D)(116) sets forth a determination of the reportable quantity for each substance that has been designated as hazardous, and 40 CFR Part 1(D)(117) applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States.

### Occupational Safety and Health Administration

The federal Occupational Safety and Health Administration's (OSHA's) mission is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in

workplace safety and health. OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation projects. OSHA standards are listed in 29 CFR Part 1910.

### 14 CFR Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace

14 CFR Part 77 establishes the requirements to provide notice to the FAA of certain proposed construction of structures or alteration of existing structures. Part 77 also establishes standards used to determine obstructions to air navigation and navigational and communication facilities, the process for aeronautical studies to determine potential effects on navigable space, and the process to petition the FAA for discretionary review of determinations related to construction or alternation.

The FAA Notification overlay outlines the area surrounding the airport required to comply with federal law requiring notification to the FAA for the construction of new structures or objects in the airspace. Federal law (i.e., 14 CRF Part 77 Notification Criteria) requires project sponsors of structures or objects such as antennas, trees, or construction cranes, that exceed the Part 77 height criteria to submit to the FAA a Notice of Proposed Construction or Alternation (Form 7460-1). The Part 77 height criteria apply to both any construction or alteration that is more than 200 feet above the ground anywhere in the United States and any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

- 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport . . . with its longest runway more than 3,200 feet in actual length, excluding heliports.
- 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport . . . with its longest runway no more than 3,200 feet in actual length, excluding heliports.
- 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport. . . .

Additionally, the FAA may require notification for construction or alternation on applicable airports and heliports as well as for structures that may cause signal reception interference with navigational aids.

#### 4.9.1.2 State

### Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management Project, which is similar to but more stringent than the Federal RCRA Project. The act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which describe the following aspects of the requirements for the proper management of hazardous waste:

- Identification and classification
- Generation and transportation
- Design and permitting of recycling, treatment, storage, and disposal facilities
- Treatment standards
- Operation of facilities and staff training
- Closure of facilities and liability requirements

These regulations list more than 800 materials that may be hazardous. They establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with the California Department of Toxic Substances Control (DTSC).

### Certified Unified Program Agency

Pursuant to California Health and Safety Code, Chapter 6.11, the California Environmental Protection Agency (CalEPA) established the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which consolidated several existing state programs related to hazards and hazardous materials. The Unified Program allows jurisdictions to designate Certified Unified Program Agencies (CUPAs) to implement associated state regulations within their respective jurisdictions. CUPAs maintain records regarding location and status of sites that use hazardous materials within their jurisdiction and administer programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency (i.e., a participating agency) that implements one or more Program Elements in coordination with the CUPA. For businesses in Monterey County, applicable hazardous materials plans (such as Risk Management Plans and Hazardous Materials Business Emergency Plans) are submitted to and approved by the County Hazardous Materials Management Services (HMMS), the local CUPA.

### 2018 State of California Multi-Hazard Mitigation Plan

The State of California Multi-Hazard Mitigation Plan is the official statement of the state's hazard identification, vulnerability analysis, and hazard mitigation strategy. The Plan's goal o is to guide implementation activities to achieve the greatest reduction of vulnerability, saving lives, reducing injuries and property damage, and protecting the environment. The Plan helps administer the Local Hazard Mitigation Plan program for the state. The California Emergency Management Agency supports and assists local governments in the development of Local Hazard Mitigation Plans and tracks the progress and effectiveness of plan updates and projects. It provides local governments with information on integrating hazard identification, risk assessment, risk management, and loss

prevention into a comprehensive approach to hazard mitigation and helps them identify cost-effective mitigation measures and projects.

### California Environmental Protection Agency

CalEPA was created in 1991. It unified California's environmental authority into a single cabinet-level agency and brought the California Air Resources Board, State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), California Department of Resources, Recycling and Recovery, DTSC, the Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation under one agency. These agencies were placed within the CalEPA "umbrella" for the protection of human health and the environment to ensure a coordinated deployment of state resources. Their mission is to restore, protect, and enhance the environment and ensure public health, environmental quality, and economic vitality.

### Department of Toxic Substance Control

The DTSC, a department of CalEPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. The DTSC regulates hazardous waste primarily under the authority of the RCRA and California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. California Government Code (CGC), Section 65962.5 (commonly referred to as the Cortese List), includes DTSC-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the SWRCB as having underground storage tank leaks or discharges of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material. For site remediation, DTSC does not publish, nor use, generic soil cleanup levels for contaminated sites. Because each site is unique, cleanup levels must be calculated for each site through a risk assessment, which analyzes the types of toxic materials at each site, the potential receptors, the pathways that the toxic compounds might follow to get to the receptors, and their fate in the environment. The process begins with a Preliminary Endangerment Assessment, which may be followed by a health risk assessment, depending on the findings of the Preliminary Endangerment Assessment.

### State Water Resources Control Board

The SWRCB is responsible for statewide regulation of water resources. The SWRCB's mission is to "ensure the highest reasonable quality for waters of the State of California while allocating those waters to achieve the optimum balance of beneficial uses." Thus, the SWRCB has joint authority over water allocation and water quality protection. The SWRCB supports the efforts of the individual RWQCBs, of which there are nine statewide. Each RWQCB makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements,

determining compliance with those requirements, and taking appropriate enforcement actions. Water quality standards are defined in each RWQCB's respective Basin Plan. Basin plans must conform to the policies set forth in the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and established by SWRCB in its state water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The RWQCBs are also authorized to enforce discharge limitations, take actions to prevent violations of these limitations from occurring, and conduct investigations to determine the status of quality of any of the waters of the State of California within their region. Civil and criminal penalties are also applicable to people who violate the requirements of the Porter-Cologne Act or SWRCB/RWQCB orders.

### California Porter-Cologne Water Quality Control Act

The federal CWA places the primary responsibility for the control of water pollution and for planning the development and use of water resources with the individual states, although it does establish guidelines for the states to follow in developing their programs. California's primary statute governing water quality and water pollution is the Porter-Cologne Act, which grants the SWRCB and RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require the cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

### California Office of Emergency Services

To protect public health and safety as well as the environment, the California Office of Emergency Services is responsible for establishing and managing statewide standards for business and area plans related to the handling and release, or threatened release, of hazardous materials. The California Office of Emergency Services requires basic information regarding hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) to be available to firefighters, public safety officers, and regulatory agencies. Typically, this information should be included in business plans to prevent or mitigate impacts on the environment or the health and safety of individuals from the release or threatened release of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code, Article 1, Hazardous Materials Release Response and Inventory Project (Sections 25500 to 25520), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

19 CCR (Public Safety; Division 2; Office of Emergency Services; Chapter 4; Hazardous materials Release Reporting, Inventory, and Response Plans; Article 4 [Minimum Standards for Business

Plans]) establishes minimum statewide standards for hazardous materials business plans. These plans must include the following: a hazardous materials inventory in accordance with Sections 2729.2 to 2729.7; emergency response plans and procedures in accordance with Section 2731; and training project information in accordance with Section 2732. Business plans should contain basic information regarding the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Each business will prepare a hazardous materials business plan if that business uses, handles, or stores a hazardous materials or an extremely hazardous materials in quantities greater than or equal to the following:

- 500 pounds of a solid substance;
- 55 gallons of a liquid;
- 200 cubic feet of compressed gas;
- A hazardous compressed gas in any amount; and/or
- Hazardous waste in any quantity.

### California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency with responsibility for worker safety with respect to the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements regarding employee training, the availability of safety equipment, accident-prevention projects, and hazardous substance exposure warnings.

### Asbestos-Containing Materials Regulations

State-level agencies, in conjunction with the USEPA and Cal/OSHA, regulate removal, abatement, and transport procedures for asbestos-containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations. Medical evaluation and monitoring are required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk of asbestos emissions and exposure. Federal, state, and local agencies must also be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

### Polychlorinated Biphenyls

The USEPA prohibited the use of polychlorinated biphenyls (PCBs) in the majority of new electric equipment starting in 1979 and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electric equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act (15 USC 2601 et seq.). Relevant

regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and highly specific safety procedures for their disposal. The state also regulates electric equipment with PCBs and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed of accordingly. At lower concentrations for non-liquids, RWQCBs may exercise discretion over the classification of such wastes.

### Lead-Based Paint

Cal/OSHA's Lead in Construction Standard is contained in 8 CCR 1532.1. The regulations address all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

### Hazardous Materials Transportation

The California Highway Patrol and California Department of Transportation (Caltrans) are the state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. These agencies also govern permitting for hazardous materials transportation within the state.

### Irrigated Lands Regulatory Program

The Irrigated Lands Regulatory Program addresses waste discharge (e.g., sediments, pesticides, nitrates) from commercial irrigated lands, including nurseries, which are required to obtain regulatory coverage. Coverage is not required if a property is not used for commercial purposes, is not irrigated (dryland farmed), or if commercial irrigated lands are covered under another program (i.e., Dairy, Poultry, or Bovine). Options for regulatory coverage include joining a third-party (coalition) group or obtaining Individual Regulatory Coverage. The goal of the Irrigated Lands Regulatory Program is to reduce impacts of agricultural discharges to groundwater and surface water. Under this program, growers must implement management practices and submit farm evaluations and nitrogen management data.

### California Department of Transportation Division of Aeronautics

The California State Aeronautics Act (Public Utilities Code, Section 21001 et seq.) governs aviation, airport operation, and land use safety in California. It authorizes the Caltrans Division of Aeronautics to regulate airports, promote safety, and develop aeronautics. Key updates of the 2019 update focus on funding for airport projects and the integration of Advanced Air Mobility. The Caltrans Division of Aeronautics publishes the California Airport Land Use Planning Handbook, which establishes statewide guidelines for airport land use compatible planning based on the State Aeronautics Act.

### Airport Land Use Commissions and Compatibility Plans

In 1967, the California State Legislature authorized the creation of Airport Land Use Commissions (ALUCs), to protect the "public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses." ALUCs generally evaluate an area 2 miles around an airport.

The law requires each county's ALUC to prepare an Airport Land Use Compatibility Plan (ALUCP) with a 20-year planning horizon. An ALUCP provides for the orderly growth of an airport and the area surrounding the airport within the jurisdiction of the ALUC, excluding existing land uses. Its primary function is to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general and to promote compatibility between airports and the land uses that surround them "to the extent that these areas are not already devoted to incompatible uses" (Public Utilities Code, Section 21674[a]). This is generally accomplished by examining land uses within specific airport safety zones.

CGC Section 65302.3 further requires that General Plans and any applicable Specific Plan be consistent with ALUCPs. In addition, General Plans and applicable Specific Plans must be amended to reflect amendments to the ALUCP. Ideally, the ALUCP should be updated every 5 to 10 years to ensure consistency with General Plans, Specific Plans, and other plan types. The primary focus of an ALUCP is on broadly defined noise and safety impacts. In addition, ALUCs make compatibility determinations for compliance of all proposed development around an airport. A local government body may override an ALUC compatibility determination for any proposed incompatible land use by a two-thirds majority vote; however, they must notify the Division of Aeronautics and the ALUC of this intent 45 days prior to approving the override. The division would then respond within 30 days to the local agency's overrule comments.

### Real Estate Disclosure

California Business and Professions Code, Sections 11010(a) and 11010(b)(13); California Civil Code, Sections 1102.6, 1103.4, and 1353; and California Code of Civil Procedure, Section 731a, require as part of residential real estate transactions that information be disclosed regarding whether the property is situated within an Airport Influence Area (AIA). With certain exceptions, these state requirements apply both to the sale or lease of newly subdivided lands and to the sale of existing residential property.

#### 4.9.1.3 Local

### 2010 General Plan

The Monterey County 2010 General Plan (2010 General Plan) includes policies that address the existing and future land use for the large rural areas used predominately for agricultural purposes

as well as for the diversity of unincorporated communities. The transport, handling, and use of chemicals and other hazardous materials is regulated in the Agriculture Element, Safety Element, and Circulation Element.

### *Agriculture Element*

Policy AG–1.2 requires well-defined buffer areas to be provided as partial mitigation for new non-agricultural development proposals that are located adjacent to agricultural land uses on farmlands designated as Prime, of Statewide Importance, Unique, or Local Importance.

a. Criteria. The following criteria shall be used to establish agricultural buffers to protect current and reasonably foreseeable future agricultural operations:
    1. The type of non-agricultural use proposed, site conditions, and anticipated agricultural practices.
    2. Weather patterns, crop type, machinery and pesticide use, existence of topographical features, trees and shrubs, and possible development of landscape berms to separate the nonagricultural use from the existing agricultural use.

b. Buffers. Buffers and/or easements shall be:
    3. Designed to comply with applicable state and local laws regulating school buffers, pesticide buffers, and other controls.
    4. Provided on the land designated for the proposed new use and not on the adjacent agricultural land unless by mutual agreement between the two landowners. Buffer maintenance will be the responsibility of the underlying fee title owner and shall be enforceable by the County of Monterey.
    5. Designed to be used for the purposes and manner described in this policy and for no other purposes unless agreed to by abutting landowners. Drainage, shading, vegetation, and erosion control shall be made beneficial to the adjacent agricultural use.

In circumstances in which a buffer is not meant to be permanent, it will be terminated once the underlying agricultural purpose for the buffer no longer exists. The Agricultural Advisory Committee shall review and make recommendations on establishment of, and changes to, buffer zones.

### *Safety Element*

Policy S-3.6 requires the County to maintain an inventory of areas where there is a high probability of accelerated erosion, sedimentation, and/or chemical pollution as part of the County's geographic information system (GIS) mapping database.

### *Circulation Element*

Goal C-7 and Policies C-7.1 through C-7.5 promote safe, effective, and efficient use of existing and future air facilities. For instance, Policies C-7.2 and C-7.4 require that land uses within the vicinity of public airports and other areas that may be impacted by airport operations be compatible

with those operations and the ALUCP and incorporate measures to mitigate potential safety and noise impacts on those uses. Policy C-7.5 provides controls on private airstrips and agricultural landing fields.

## Area and Master Plans

### *Greater Monterey Peninsula Area Plan*

Policy GMP-4.2 requires development within the vicinity of the Monterey Peninsula Airport and the Marina Municipal Airport to be sited, designed, and/or constructed to minimize noise hazards from aircraft and other sources. The policy also encourages the County to adopt the Airport Noise Control and Land Use Compatibility standards for areas within the vicinity of the Monterey Peninsula Airport and the Marina Municipal Airport.

### *Fort Ord Master Plan*

Hazardous and Toxic Materials Safety Policy A-1 requires the County to monitor and report to the public all progress made on the Remedial Action Record of Decision (RA-ROD) for cleanup of the former Fort Ord.

Hazardous and Toxic Materials Safety Policy B-1 requires the County to monitor implementation procedures of the RA-ROD and work cooperatively with the U.S. Army and all contractors to ensure safe and effective removal and disposal of hazardous materials, ensure compliance with all applicable regulations and hazardous materials, and provide for the protection of the public during remediation activities.

Hazardous and Toxic Materials Safety Policy B-2 requires the County to monitor implementation procedures of the RA-ROD and work cooperatively with the U.S. Army and all contractors and future users/operators of landfill or hazardous materials storage sites at the former Fort Ord.

Hazardous and Toxic Materials Safety Policy C-1 requires hazardous materials management and disposal plans for any future projects involving the use of hazardous materials.

### *North County Land Use Plan*

Key Policy 4.3.4 requires that all future development within the North County coastal segment be clearly consistent with the protection of the area's significant human and cultural resources, agriculture, natural resources, and water quality. Policy 2.3.3.B.8 prohibits release or draining of oil and other toxic substances into the estuarine system. Oil spill and toxic substance discharge contingency plans shall be developed by the appropriate agencies of Monterey County to coordinate emergency procedures for cleanup operations of all foreseeable conditions. New development shall be permitted adjacent to estuarine areas only where such development does not increase the hazard of oil spill or toxic discharge into the estuaries. Additionally, Policy 2.4.4.B.1 prohibits dumping of spoils (dirt, garbage, refuse, etc.) into riparian corridors and other drainage courses.

### *Carmel Area Land Use Plan*

General Policy 2.7.3.2 encourages low-intensity or open space uses in high hazard areas and discourages locating critical facilities (fire, police hospitals, emergency communication facilities, bridges and overpasses, public utilities, dams), heavy industry involving the manufacture or storage of explosive or toxic materials, and high occupancy structures (high-rise apartments, schools, hotels, etc.) in high hazard areas. Additionally, Policy 2.4.4.B.1 prohibits dumping of spoils (dirt, garbage, refuse, etc.) into riparian corridors and other drainage courses.

## Monterey County Code

Chapter 10.65, Hazardous Materials Registration, of the Monterey County Code (County Code) governs the use of hazardous substances and chemicals, both to protect public health and safety and to enable emergency personnel to respond safely and speedily to emergency situations. This chapter covers the construction standards and permits for underground storage tanks and registration requirements for the handling and use of hazardous materials.

Chapter 10.67, Hazardous Materials Emergency Response, of the County Code establishes the means to fund and maintain Hazardous Materials Emergency Response capability within Monterey County. This chapter requires identified General Environmental Health Permitted Businesses that are subject to an annual operating permit or registration fee, and that use, store, or otherwise handle hazardous materials that may necessitate a Fire Hazardous materials Emergency Response, to pay an annual surcharge. In addition, all Environmental Health Hazardous Materials Permitted Businesses subject to California Health and Safety Code, Sections 25500 and 25520–25536, pertaining to hazardous materials registration, are required to pay an annual surcharge. The payment of the annual surcharge is a condition of the required operating permit for those identified permitted businesses.

Chapter 15.22, Discharge of Contaminants into the Waters of the County, prohibits discharges into the waters of Monterey County that contain any contaminant or cause any contamination or pollution.

Chapter 16.10, Digging and Excavation on the Former Fort Ord, of the County Code establishes special standards and procedures for digging and excavation within the former Fort Ord military installation in addition to those contained in the Building Code.

## 1982 General Plan (Coastal)

Goal 18, Objective 18.1, and Policy 18.1.1 are intended to minimize the risks from chemical usage. Policy 18.1.1 requires the County to establish land use controls to reduce undesirable effects of hazardous chemicals.

Goal 42 and objectives and policies thereunder are intended to promote safe, effective, and efficient use of existing and future air facilities. For instance, Policy 42.1.1 requires the County to

prohibit land use activities within unincorporated areas which interfere with the safe operation of aircraft. Policy 42.2.2 requires the County to implement measures in unincorporated areas that provide for the continued safe operation of airports.

#### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.140(A)(3) prohibits new development from including subsurface disposal of hazardous or toxic chemicals. Section 20.144.040(C)(2)(g) prohibits new development adjacent to estuarine areas where the development may result in (1) drainage or discharge of oil or other toxic substances into the estuary; or (2) increased risk of oil spill or toxic substance discharge into the estuary. As such, development on parcels containing, adjacent to, or with drainage into, estuarine areas must comply with all County Code regulations of toxics and hazardous substances, as administered by the County Health Department for a review of the development's conformance with California Public Resources Code (PRC), Titles 22 and 23, and with applicable sections of the County Code pertaining to toxics and hazardous substances, prior to the application being determined complete. The applicant shall be required to provide written verification from the County Health Department that: (1) the project complies with County Code requirements; or (2) with conditions of project approval, the proposed development will comply with County Code requirements and would neither result in nor increase the hazards of drainage or discharge of oil or other toxic substances into the estuary; or (3) additional studies must be completed prior to the County Health Department's verification. Such studies shall be completed prior to the application being considered complete. Such studies shall include such information and testing as determined necessary by the County Health Department. Conditions of project approval shall be applied as necessary to assure the project would not have impacts to the estuary related to hazardous or toxic substances.

Carmel Area (Part 4) Section 20.146.120(A)(5) prohibits new development from including subsurface disposal of hazardous or toxic chemicals.

### Monterey County Environmental Health Bureau

The County Environmental Health Bureau (EHB) operates under the County Health Department. It is responsible for the oversight of the following programs:

- Consumer Health Protection Services
- Drinking Water Protection Services
- Land Use (also referred to as Health Department – Land Use, formerly Environmental Health Review Services)
- HMMS
- Recycling Resource and Recovery
- Solid Waste

The HMMS is designated as the local CUPA in Monterey County and is responsible for inspecting facilities in Monterey County to verify proper storage, handling, and disposal of hazardous materials and hazardous wastes.

### Investigation/Remediation of Contaminated Sites

The EHB requires investigation and cleanup of sites that may have become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities. The EHB oversees cleanup of emergency response hazardous materials releases of a known chemical. The investigation and cleanup of other contaminated sites must be conducted under the supervision of the DTSC. As such, developers must request state oversight of cleanup or additional investigation and remediation plan review.

### Monterey County 2022 Multi-Jurisdictional Hazard Mitigation Plan

The Monterey County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) was most recently updated in 2022 to comprehensively identify, evaluate, and mitigate the identified current and projected hazards faced by Monterey County. The MJHMP is used by local emergency management teams, decision-makers, and agency staff to implement needed mitigation to address known hazards. The MJHMP can also be used as a tool for all stakeholders to increase community awareness of local hazards and risks and provide information about options and resources available to reduce those risks. The MJHMP describes historical hazard events and the future probability of these hazards and their impact on communities within Monterey County. Vulnerability assessments summarize the impacts of hazards on critical infrastructure, populations, and future development. The MJHMP also includes a Mitigation Strategy that identifies mitigation actions to ensure future development is resilient to known hazards.

### Airport Land Use Plans

Most counties have established an ALUC, as provided for by law, to prepare ALUCPs for the airports in that county and to review land use plans, development proposals, and certain airport development plans for consistency with the compatibility plans. In Monterey County, the ALUC function rests with the Monterey County ALUC.

#### *Marina Airport Land Use Compatibility Plan*

The Marina Municipal ALUCP updates the 1996 Comprehensive Land Use Plan for Marina Municipal Airport. The Marina Municipal ALUCP was adopted in May 2019 by the Monterey County ALUC. The Marina Municipal ALUCP is based on the FAA approved Airport Layout Plan, approved by the FAA in 2018. That plan depicts both the current and planned facilities for the airport. The Airport Safety Zones associated with runway activities and AIAs for the Marina Municipal Airport overlap with the project area, as shown on Figure 4.9-2a, Marina Municipal

Airport – Airport Safety Zones, of this document and Exhibit 4C of the ALUCP. These Airport Safety Zones include the following:

- Runway Protection Zone (RPZ)
- Inner Approach/Departure Zone (IADZ)
- Inner Turning Zone (ITZ)
- Outer Approach/Departure Zone (OADZ)
- Sideline Safety Zone (SSZ)
- Airport Property Zone
- AIA

Pursuant to ALUCP Policy 4.1.10.1 and Public Utilities Code, Section 21676, all proposed land use policy actions that affect property within the AIA must be sent to the ALUC for a Consistency Determination. Additionally, Table 4B Safety Criteria Matrix of the ALUCP outlines the maximum densities, intensities, required open space land requirements, prohibited uses, and other development conditions for proposed development within the Airport Safety Zones (refer to Table 4.9-4, Opportunity Sites Within Airport Safety Zones, of this PEIR section).

#### *Monterey Regional Airport Land Use Compatibility Plan*

The 2019 Monterey Regional ALUCP is intended to protect and promote the safety and welfare of residents, businesses, and airport users near the airport, while supporting the continued operation of the airport. Much of the Planning Area of the ALUCP is within the AIA, as shown in Exhibit 1B of the Monterey Regional ALUCP. The Airport Safety Zones associated with runway activities and AIAs for the Monterey Regional Airport overlap with the v, as shown on Figure 4.9-2b, Monterey Regional Airport – Airport Influence Area, of this PEIR and Exhibit 4C of the ALUCP.

Pursuant to ALUCP Policy 4.1.10.1 and California Public Utilities Code, Section 21676, all proposed land use policy actions that affect property within the AIA must be sent to the ALUC for a Consistency Determination. Additionally, Table 4B Safety Criteria Matrix of the ALUCP outlines the maximum densities, intensities, required open space land requirements, prohibited uses, and other development conditions for proposed development within the Airport Safety Zones (refer to Table 4.9-4 of this PEIR section).

### 4.9.2 Environmental Setting

Poor management or misuse of toxic chemicals (e.g., pesticides, herbicides, fertilizers) or dangerous substances (e.g., petroleum, natural gas, and radioactive, flammable, or explosive materials) can lead to significant release or spill of hazardous materials, potentially resulting in evacuations, injuries, and fatalities. There are various agricultural, commercial, and industrial uses within Monterey County that involve the transport, use, storage, and disposal of potentially

hazardous materials that could adversely affect soil and groundwater. In particular, the primary users of chemicals in Monterey County generally include agriculture, hospitals, heavy industry, laboratories, and utilities. Throughout Monterey County, current and former uses involving hazardous materials result in the potential for past and ongoing site contamination. For example, hazardous materials may be found in building materials, such as asbestos-containing material (ACM) or lead-based paints (LBP), or may have been used routinely for the operation of certain land uses, such as auto repair shops, gas stations, oil and mining facilities, commercial agricultural fields, medical offices, dry cleaners, and photo processing centers. In addition, some properties in Monterey County have experienced substantial historical releases of hazardous materials resulting in potentially contaminated soils and groundwater on site and within the vicinity (Section 4.9.2.1). Potentially hazardous materials commonly found in urban areas include cleaning and metal solvents, pesticides/herbicides, paints, oils, and lubricants.

#### 4.9.2.1 Hazardous Sites

CGC Section 65962.5 requires the CalEPA to compile, maintain, and update specified lists of hazardous materials release sites. California Environmental Quality Act (CEQA) (PRC Section 21092.6) requires the lead agency to consult the lists compiled pursuant to CGC Section 65962.5 to determine if the project area is identified on any of the following lists:

- **USEPA National Priorities List:** Lists all sites under the USEPA Superfund program, which was established to fund the cleanup of contaminated sites that pose risks to human health and the environment.
- **USEPA CERCLIS and Archived Sites:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list contains 15,000 sites nationally identified as hazardous sites. This would also involve a review of archived sites that have been removed from CERCLIS due to No Further Remedial Action Planned status.
- **USEPA RCRA Information System (RCRIS or RCRAInfo):** The RCRIS is a national inventory system for hazardous waste handlers. Generators, transporters, handlers, and disposers of hazardous waste are required to provide information for this database.
- **DTSC Cortese List:** The California Department of Toxic Substances Control (DTSC) maintains the Hazardous Waste and Substances Sites (Cortese) List as a planning document for use by state and local agencies to comply with CEQA by providing the location of hazardous materials release sites. This list includes the Site Mitigation and Brownfields Reuse Program Database (CalSites).
- **DTSC HazNet:** DTSC uses this database to track hazardous waste shipments.
- **SWRCB LUSTIS:** Leaking Underground Storage Tank Information System (LUSTIS). The SWRCB maintains an inventory of underground storage tanks and leaking underground storage tanks, which tracks unauthorized releases.

The DTSC's EnviroStor database and the SWRCB's GeoTracker database are the online databases that track hazardous materials release sites on the lists identified compiled pursuant to CGC Section 65962.5. EnviroStor is the DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with either known contamination or where there may be reasons to investigate further. GeoTracker is the SWRCB's database system used by the state board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks.

Reviews of the DTSC's EnviroStor database and the SWRCB's GeoTracker database indicate various hazardous waste reporting facilities throughout Monterey County. Within 0.25 mile of the opportunity sites, there are 17 known past or existing regulated hazardous sites identified by GeoTracker and five sites identified by EnviroStor (Figures 4.9-1a through 4.9-1i, Hazardous Materials Sites in Proximity to Opportunity Sites; Table 4.9-2, Regulated Hazardous Sites Within 0.25 Mile of the Opportunity Sites; DTSC 2025; SWRCB 2025). These hazardous sites have required regulatory oversight to address site contamination issues. Of the GeoTracker sites, seven are active sites that operate under Waste Discharge Requirements (WDRs), three are sites that historically operated under WDRs, one is a historical Confined Animal Facility (CAF), one is inactive, one site is undergoing remediation, two have single-walled underground storage tanks with no completed Closure Commitment Plan, and two sites are undergoing site assessment (Table 4.9-1, Status Definitions for Regulated Hazardous Sites, and Table 4.9-2). Of the EnviroStor sites, one site is listed as No Action Required, one site is listed as No Further Action, one site has been withdrawn, one site has been referred to other agencies, and one site is active with ongoing regulatory activities.

Table 4.9-1 defines each of the status categories for GeoTracker and EnviroStor, and Table 4.9-2 provides a summary of the regulated hazardous sites identified by GeoTracker and EnviroStor within 0.25 mile of the opportunity sites. There are also 39 GeoTracker sites that are identified as Completed – Case Closed within 0.25 mile of the opportunity sites; these are not shown in Table 4.9-2.

**Table 4.9-1. Status Definitions for Regulated Hazardous Sites**

| Status Category | Definition |
|---|---|
| **GeoTracker** | |
| Active – WDR | Active sites that operate under WDRs issued by the SWRCB or a RWQCB. |
| Historical – WDR | Sites that historically operated under WDRs issued by the SWRCB or a RWQCB. |
| Historical – CAF | Historical farms or ranches where livestock are/were held for a significant period of time and provided food in the facility (as opposed to grazing), and whose discharges are regulated by the SWRCB and/or a RWQCB. Discharges include manure, wastewater, and stormwater runoff that may contain waste constituents. |
| Open – Inactive | No regulatory oversight activities are being conducted by the lead agency. |
| Open – Remediation | The responsible party is implementing one or more approved remedy under an approved cleanup plan for the site. This includes any ongoing remedy that is either passive (e.g., long-term groundwater monitoring program) or active (e.g., treatment), or uses a combination of technologies. |
| Open – Site Assessment | Site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring at the site. Examples of site assessment activities include, but are not limited to: 1) identification of the contaminants and the investigation of their potential impacts; 2) determination of the threats/impacts on water quality; 3) evaluation of the risk to humans and ecology; 4) delineation of the nature and extent of contamination; 5) delineation of the contaminant plume(s); and 6) development of the Site Conceptual Model. |
| SWT – No Plan Returned | The Closure Commitment Plan for a single-walled underground storage tank (SWT) is either overdue, was never submitted, or has not been officially recognized as received within the GeoTracker system for that particular site. |
| Completed – Case Closed | A closure letter or other formal closure decision document has been issued for the site. |
| **EnviroStor** | |
| No Action Required | Incident is minor, requiring no remedial action (Phase I Assessments). |
| No Further Action | DTSC has made a clear determination that the property does not pose a problem to the environment or to public health (Phase II Assessments). |
| Inactive – Withdrawn | Regulatory activities have paused as the lead agency requested withdrawal and no longer seeks DTSC project approval. |
| Inactive – Needs Evaluation | Non-active sites where DTSC has determined a Preliminary Environmental Assessment or other evaluation is required. |
| Refer: Other Agency | Where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency. |
| Active | Ongoing regulatory activities. |
| Certified | DTSC has certified that the cleanup action is complete. |

**Notes:** CAF = Confined Animal Facilities; DTSC = California Department of Toxic Substances Control; RWQCB = Regional Water quality Control Board; SWRCB = State Water Resources Control Board; WDR = Waste Discharge Requirements

**Table 4.9-2. Regulated Hazardous Sites Within 0.25 Mile of the Opportunity Sites**

| Site Name | GeoTracker Status | EnviroStor Status | Opportunity Site(s) Within 0.25 Mile |
|---|---|---|---|
| Bolsa Knolls Middle School | N/A | No Action Required | 4 |
| California Utilities | Active – WDR | N/A | 24 |
| Carmel Middle School Expansion | N/A | Inactive – Withdrawn | 18–22, 37 |
| Carmel Valley Ranch (User) | Active – WDR | N/A | 36, 56 |
| Chualar River Road Disposal Site | Open – Inactive | N/A | 28, 29 |
| Davis Road Disposal Site | N/A | Refer: Other Agency | 5, 6 |
| Dick's Exxon/Valero Service | Historical – WDR | N/A | 44 |
| Dune Co of Salinas | Active – WDR | N/A | 27–29 |
| Falcon Trading – Maintenance Areas | Open – Remediation | N/A | 49, 50 |
| Former Beacon SS#3733 | Historical – WDR | N/A | 8, 9, 44 |
| Fort Ord York School Agreement | N/A | Active | 46, 47 |
| KCAC Asbestos Process Facility | Historical – WDR | N/A | 32 |
| Lemos Service Inc. DBA Lemos 76 | SWT – No Plan Returned | N/A | 18–20 |
| Monterey Regional Airport | Open – Site Assessment | N/A | 52 |
| Moreno Petroleum PFAS | Open – Site Assessment | N/A | 49, 50, 64 |
| Prunedale Fuel and Food | SWT – No Plan Returned | N/A | 10 |
| Prunedale Shopping Center | Active – WDR | N/A | 44 |
| Prunedale Shopping Center Onsite WWTS | Active – WDR | N/A | 10, 39 |
| Rogge Road School | N/A | No Further Action | 4 |
| Sala Dairy | Historical – CAF | N/A | 1 |
| White Oaks Plaza Onsite WWTS | Active – WDR | N/A | 55 |
| White Oaks Subdivision Onsite WWTS | Active – WDR | N/A | 55 |

**Notes:** N/A = Not listed on this database; WWTS = Wastewater Treatment System

Open GeoTracker sites include one land disposal site (Chualar River Road Disposal Site), which has been listed as inactive since 2012; one leaking underground storage tank cleanup site (Facon Trading – Maintenance Areas), which is undergoing remediation; and two cleanup program sites (Monterey Regional Airport and Moreno Petroleum per- and polyfluoroalkyl substances [PFAS]), which are undergoing site assessment. Active EnviroStor sites include one federal Superfund site (Fort Ord York School Agreement).

The Superfund site is within 0.25 mile of Opportunity Sites 46 and 47. The 27,827-acre Fort Ord site, a former United States Army post, was placed on the Superfund program's National Priorities List in 1990. The post formally closed in 1994 due to Base Realignment and Closure action. The site contained leaking petroleum underground storage tanks, a 150-acre landfill used to dispose of residential waste and small amounts of commercial waste generated by the base, a former fire drill

area, motor pool maintenance areas, small dumpsites, small arms target ranges, an 8,000-acre firing range, and other limited areas that pose threats from unexploded ordnance (USEPA 2025).

A federal Facility Agreement was signed by the U.S. Army, USEPA, DTSC, and the RWQCB Central Coast Region in 1990. The majority of the site is being addressed by the U.S. Army, with USEPA oversight. In addition, the Fort Ord Reuse Authority (FORA) implemented the Privatized Cleanup portion of Fort Ord with oversight by the U.S. Army, USEPA, and DTSC. FORA voluntarily entered into an Administrative Order on Consent with USEPA and DTSC for the cleanup of approximately 3,300 acres of the former military base in May 2007. The Administrative Order on Consent required FORA to clean up the parcels to an extent that would protect human health and environment (USEPA 2025). FORA officially dissolved in June 2020, as scheduled, after fulfilling its mission to plan and oversee the transition of the former military base to civilian use. Based on successful munitions and soil cleanup efforts, the USEPA published a Federal Register notice announcing the deletion of 11,934 acres of the 27,827-acre Fort Ord Superfund site from the Superfund program. This partial deletion only includes a part of the cleanup at a portion of the site where cleanup is finished and only covers cleanup work for military munitions and soil pollution (Fort Ord Cleanup 2026). While FORA's Privatized Cleanup Program covered specific areas of Fort Ord, the U.S. Army retains responsibility for other areas under the Superfund program. The Army continues to manage long-term groundwater cleanup and other contaminated sites, with oversight from the USEPA and California regulators (USEPA 2025).

The cleanup and investigation of Fort Ord is separated into three programs: the Army's Soil and Groundwater Contamination Cleanup Program, the Army's Munitions and Explosives of Concern Program, and the Fort Ord Reuse Authority's Privatized Cleanup Program (which has been completed). Potential for exposure to contaminants has been reduced from cleanup activities, such as the continuing operation of the groundwater treatment systems at the former fire practice area, the landfill, and the Site 2/12 Area; the capping of the landfill and removal and treatment of landfill gas; successful completion of a pilot soil vapor extraction system for volatile organic compounds in the vadose zone above the carbon tetrachloride plume; and the removal of soil and debris. Munitions and Explosives of Concern removal actions, fencing, warning signs, and patrols have further reduced exposure to Munitions and Explosives of Concern. Contaminated groundwater is not being used for drinking water. Following initial actions to protect human health and the environment, site studies, cleanup, and monitoring are ongoing (USEPA 2025).

#### 4.9.2.2 Hazardous Materials and Agriculture

The agricultural industry is a heavy user of pesticides and fertilizers to control weeds, fungi, rodents, and insects that are harmful to their crops. Accidental releases of pesticides, fertilizers, and other agricultural chemicals may be harmful to both humans and the environment. For instance, the incorrect production, transportation, and storage of these chemicals can contaminate

the soil, air, and water, and can cause a fire or an explosion. Nevertheless, agricultural pesticides are produced, transported, and used daily in and around Monterey County.

As described in Section 4.2, Agriculture and Forestry Resources, Opportunity Sites 1 and 2 are currently zoned for agriculture. Opportunity Sites 5 and 6 are zoned as the Limited Agricultural Combining District. Ten opportunity sites (i.e., Opportunity Sites 1, 2, 19 through 22, 24 through 26, and 37) have existing agricultural operations on site. Additionally, Opportunity Sites 1 through 5, 11 through 15, 24 through 26, 32, and 50 are currently adjacent to agricultural lands.

#### 4.9.2.3 Battery Energy Storage Facilities

Currently, four battery energy storage system (BESS) facilities are in UMC:

- Pacific Gas & Electric Elkhorn BESS
- Dynagy Moss Landing Power Plant Hybrid
- D'Arrigo Brothers – Phase 4
- Cal Flats BESS

No BESS facilities are currently in incorporated areas of Monterey County. BESS facilities can substantially affect the surrounding communities and environment. For instance, a fire at the Moss Landing site on January 2–25, 2025, forced the evacuation of over 1,200 residents, shut down a portion of State Route 1 (also known as Highway 1), and caused re-ignitions, with the facility burning for several days. However, none of the opportunity sites are within 2 miles of a BESS facility.

Additionally, the siting of opportunity sites considered proximity to existing industrial uses or hazardous facilities so it would be highly speculative to analyze potential impacts from BESS facilities on the housing sites. Therefore, there is no further discussion of potential future impacts on the project from BESS facilities.

#### 4.9.2.4 Hazardous Materials Management

The County's HMMS is designated as the local CUPA in Monterey County. It is responsible for inspecting facilities in Monterey County to verify proper storage, handling, and disposal of hazardous materials and hazardous wastes. The HMMS also provides emergency response 24 hours a day, 7 days per week, to emergency incidents requiring County Health Department oversight, including the following

- Hazardous materials releases and spills
- Environmental crimes
- Bioterrorism
- Illegal drug laboratories
- Sewage spills
- Food poisoning incidents

Emergency Response Team members have received over 200 hours of specialized training in emergency response, chemical identification and incident command. They are trained and equipped to handle full level A (i.e., involving the most dangerous and complex hazardous materials) entry into serious hazardous materials incidents, as well as decontamination, air monitoring, and technical reference support. Emergency Response Team members respond and work with local fire and police agencies, California Highway Patrol, Caltrans, U.S. Coast Guard, and National Martine Sanctuary personnel.

#### 4.9.2.5 Sensitive Land Uses

Land uses that are particularly sensitive to the release of hazards or hazardous materials include residential, educational, assisted living, daycare, and agricultural uses. In particular, CEQA requires analysis of proposed projects that may emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or planned school. (PRC 21151.4, 21151.8.) The following opportunity sites shown in Table 4.9-3, Schools Within 0.25 Mile of Opportunity Sites, are within 0.25 mile (1,320 feet) of schools.

**Table 4.9-3. Schools Within 0.25 Mile of Opportunity Sites**

| School Name | School Type | Distance (feet) | Opportunity Site |
|---|---|---|---|
| Gavilan View Middle School | Public | 487 | 1 |
| | | 947 | 2 |
| | | 1,304 | 3 |
| La Joya Elementary School | Public | 988 | 4 |
| John Gutierrez Middle School | Public | 528 | 4 |
| Pacific Coast Christian Academy | Private | 392 | 4 |
| Prunedale Christian Academy | Private | 711 | 8 |
| Castroville Elementary School | Public | 691 | 14 |
| | | 482 | 15 |
| Chualar Union School | Public | 138 | 25 |
| | | 1,024 | 26 |
| | | 1,053 | 27 |
| | | 1,134 | 28 |
| Castroville Elementary School | Public | 953 | 30 |
| San Lucas Union School | Public | 1,165 | 32 |
| | | 324 | 33 |
| | | 337 | 34 |
| Carmel Middle School | Public | 931 | 37 |
| All Saints Episcopal Day School | Private | 285 | 38 |
| Castroville Elementary School | Public | 1,150 | 41 |
| Stevenson School – Carmel Campus | Private | 283 | 43 |
| Prunedale Christian Academy | Private | 709 | 44 |

**Table 4.9-3. Schools Within 0.25 Mile of Opportunity Sites**

| School Name | School Type | Distance (feet) | Opportunity Site |
|---|---|---|---|
| The York School | Private | 0[1] | 46 |
| | | 566 | 47 |
| Hall District Elementary School | Public | 782 | 48 |
| Pajaro Middle School | Public | 475 | 49 |
| | | 478 | 50 |
| | | 979 | 51 |

**Note:**

[1] Opportunity Site 46 is on a portion of The York School.

#### 4.9.2.6 Airport Land Use Compatibility

Four public airports operate within Monterey County:

- Monterey Regional Airport
- Salinas Municipal Airport
- Mesa Del Rey Airport
- Marina Municipal Airport

Marina Municipal Airport and Monterey Regional Airport are within the western portion of Monterey County and within 2 miles of the project area.

### Airport Safety Zones

Opportunity Sites 31 and 53 are within 2 miles of the Marina Municipal Airport and are within Zone 7, the AIA, of the Marina Municipal Airport (Figure 4.9-2 a; Table 4.9-4, Opportunity Sites Within Airport Safety Zones). The Marina Municipal ALUCP considers the aircraft accident risk level to be low within Zone 7 (the AIA) (City of Marina 2006).

Opportunity Sites 46, 47, and 52 are within 2 miles of Monterey Regional Airport. A portion of Opportunity Site 46 is within Zone 4, the OADZ, and the remainder of Opportunity Site 46 and all of Opportunity Sites 47 and 52 are within Zone 7, the AIA, of the Monterey Regional Airport (Figure 4.9-2b; Table 4.9-4). The Monterey Regional ALUCP considers the aircraft accident risk level to be moderate within Zone 4 (the OADZ), encompassing approximately 5 percent of general aviation aircraft accidents, and considers the risk level to be low within Zone 7 (the AIA) (Monterey County ALUC 2019).

**Table 4.9-4. Opportunity Sites Within Airport Safety Zones**

| Airport | Opportunity Site | Airport Safety Zone Number | Airport Safety Zone Definition |
|---|---|---|---|
| Marina Municipal Airport | 31 | 7 | AIA |
| | 53 | 7 | AIA |
| Monterey Regional Airport | 46 | 4 | OADZ |
| | 47 | 7 | AIA |
| | 52 | 7 | AIA |

**Note:** AIA = Airport Influence Area; OADZ = Outer Approach/Departure Zone

Additionally, portions of Opportunity Sites 46 and 47 already exceed the Part 77 height criteria.

## Safety Zone Land Use Compatibility Standards

The Safety Zone Land Use Compatibility Standards in the Marina Municipal ALUCP and Monterey Regional ALUCP restrict the development of land uses that could pose particular hazards to the public or to vulnerable populations in case of an aircraft accident (City of Marina 2006; Monterey County ALUC 2019).

Within Zone 7 (AIA) of both the Marina Municipal Airport and Monterey Regional Airport, the Marina Municipal and Monterey Regional ALUCPs establish the following safety criteria for surrounding development, which apply to a portion of Opportunity Site 46 and Opportunity Sites 31, 53, 47, and 52:

- **Dwelling units per acre:** No limit
- **Maximum non-residential intensity:** 300 persons per acre
- **Required open land:** 10 percent
- **Prohibited uses:**
  - Physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

Land use development (e.g., golf courses and certain types of crops) that may increase the attraction of birds.[1]

  - Outdoor stadiums and similar uses with very high intensity uses.

- Other development conditions:
  - Airport disclosure notice required.
  - Airspace review required for objects over 100 feet tall.[2]

[1] As outlined in FAA's Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports.
[2] Taller objects may be acceptable if determined not to be obstructions. Developers proposing structures that could penetrate 14 CFR Part 77 elevations must file Form 7460 with the FAA.

  - New structures are prohibited on existing terrain that penetrates 14 CFR Part 77 surfaces.[2]
  - New structures require additional airspace analysis within the 50-foot terrain penetration buffer.[2]
  - Proposed uses involving vulnerable occupants within 6,000 feet from the side of the runway and 10,000 feet from the end of the runway shall require ALUC review. In addition to the prohibited uses listed, any use involving vulnerable occupants in the area described above is strongly discouraged.[3]

Urban areas identified as "Visitor Serving Areas" in the City of Marina General Plan dated October 31, 2000, or "mixed used use areas" identified in the City of Monterey General Plan dated August 2013 are exempt from density and intensity criteria.

Within Zone 4 (OADZ) of the Monterey Regional Airport, the Monterey Regional ALUCP establishes the following safety criteria for surrounding development, which would apply to a portion of Opportunity Site 46:

- **Dwelling units per acre:** 1 dwelling unit per 2 acres
- **Maximum non-residential intensity:** 150 persons per acre
- **Required open land:** 20 percent
- **Prohibited uses:**
  - Children's schools, day care centers, libraries.
  - Hospitals, nursing homes.

Buildings with more than three above-ground habitable floors.

  - Highly noise-sensitive outdoor nonresidential uses.[4]
  - Physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

Land use development (e.g., golf courses and certain types of crops) that may increase the attraction of birds.

- Other development conditions:
  - Airport disclosure notice required.
  - Airspace review required for objects over 70 feet tall.[5]

[3] Vulnerable occupants include children, older adults, and people with disabilities. Uses with vulnerable occupants include schools, hospitals, nursing homes, assisted living facilities, and other similar non-residential uses.
[4] Examples of highly noise-sensitive outdoor nonresidential uses that should be prohibited include amphitheaters and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
[5] Taller objects may be acceptable if determined not to be obstructions. Developers proposing structures that could penetrate 14 CFR Part 77 elevations must file Form 7460 with the FAA.

### 4.9.3 Method of Analysis

The analysis contained herein addresses potential impacts related to handling and potential release of hazardous materials, location on hazardous materials sites, and airport land use compatibility from a programmatic-level and Monterey Countywide approach. Where appropriate and possible, individual opportunity sites are discussed. A qualitative analysis is provided to determine if the development and land use activities contemplated by the project would create a substantial impact related to hazardous materials and airport safety in Monterey County.

Given that the thresholds of significance in this section are primarily based on the location and environmental conditions of each site rather than the number of housing units proposed (refer to Section 4.9.4, Thresholds of Significance), this section of the PEIR evaluates each of the opportunity site parcels to determine impacts related to hazards and hazardous materials.

### 4.9.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on hazards and hazardous materials if it would:

- **Threshold 1:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- **Threshold 2:** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- **Threshold 3:** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- **Threshold 4:** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- **Threshold 5:** For a project in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.
- **Threshold 6:** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- **Threshold 7:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Discussion of the project's potential to result in routine transport, use, or disposal of hazardous materials (Threshold 1), upset or accident conditions involving the release of hazardous materials into the environment (Threshold 2), emissions or handling of potentially hazardous materials in proximity to schools (Threshold 3), and location on a hazardous materials site (Threshold 4) is

provided in Section 4.9.5, Project Impacts and Mitigation. The project's impacts regarding wildfire and emergency evacuation (Thresholds 6 and 7) are discussed in Section 4.19, Wildfire.

## 4.9.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to hazards and hazardous materials that could result from project implementation.

### 4.9.5.1 Threshold 1: Routine Transport, Use, or Disposal of Hazardous Materials

**Threshold 1:** Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

#### Impact Analysis

While the project does not seek approval of site-specific development, the HEU6 would facilitate future residential development that would likely involve the routine transport, use, and disposal of potentially hazardous materials. For instance, demolition and construction activities associated with future residential development would involve common hazardous materials, including petroleum products, solvents, paints, and other regulated materials. However, construction activities would not involve a significant amount of hazardous materials; their use would be temporary. The handling, use, transport, and disposal of hazardous materials during the construction phase of the project would comply with regulations of several agencies—the USEPA, OSHA, Cal/OSHA, and U.S. Department of Transportation. Construction standard best management practices include maintaining supplies on site for containing and cleaning small spills of hazardous materials. The property owner/developer for each project would ensure training for project construction workers on the proper use, storage, and disposal of hazardous materials would occur. The standard states that employers shall "provide employees with information on the contents of material safety datasheets or equivalent information about the substance which trains employees to use the substance safely" (8 CCR 337–340).

Following the completion of construction activities, residential uses do not generally involve the transport, use, disposal, or potential release of hazardous materials that could pose a significant hazard to the public, nearby sensitive uses such as schools, or the environment. New residential development enabled under the HEU6 would generally involve the use of household cleaners and solvents, which would not be used in large quantities that could generate a significant hazard, Moreover, such waste is managed through existing municipal solid waste disposal and recycling programs in the UMC (refer to Section 4.18, Utilities and Service Systems). While potential future residential development enabled under the HEU6 would likely involve the routine transport, use, and disposal of hazardous materials, all construction and operational activities would be required to adhere to federal, state, and local regulations for the management and disposal of hazardous

materials. These regulations have been established to protect people and the environment from the potential for a significant hazard due to the transport, use, or disposal of hazardous materials. Therefore, with compliance with applicable federal, state, and local regulations, impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.9.5.2 Threshold 2 and Threshold 4: Release of Hazardous Materials and Hazardous Sites

**Threshold 2:** Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Threshold 4:** Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?

### Impact Analysis

The project would enable potential future residential development of lands that have either known or the potential for unknown soil or groundwater contamination that could result in hazardous materials upset. Disturbance of contaminated surface soils or groundwater, the release of hazardous building materials via construction or demolition, and the operation of future sites could subject workers, neighboring land uses, and future residents to hazardous substances. The potential for exposure to contaminated sites differs Monterey Countywide, as described below.

As described in Section 4.9.2.1, there are 17 hazardous sites identified by GeoTracker and five sites identified by EnviroStor within 0.25 mile of the Opportunity Sites, not including completed/closed cases (DTSC 2025; SWRCB 2025; Table 4.9-2). These hazardous sites have required regulatory oversight to address site contamination issues. GeoTracker sites with open cases include one land disposal site (Chualar River Road Disposal Site), which is within 0.25 mile of Opportunity Sites 28 and 29; one leaking underground storage tank cleanup site (Facon Trading – Maintenance Areas), which is within 0.25 mile of Opportunity Sites 49 and 50; one cleanup program site (Monterey Regional Airport) within 0.25 mile of Opportunity Site 52; and another cleanup program site

(Moreno Petroleum PFAS), which is within 0.25 mile of Opportunity Sites 49, 50, and 64. Additionally, EnviroStor sites with ongoing regulatory activities include one federal Superfund site (Fort Ord York School Agreement) within 0.25 mile of Opportunity Sites 46 and 47 (Table 4.9-5, Active Regulated Hazardous Sites Within 0.25 Mile of the Opportunity Sites).

**Table 4.9-5. Active Regulated Hazardous Sites Within 0.25 Mile of the Opportunity Sites**

| Site Name | Opportunity Site(s) Within 0.25 Mile | Distance to the Opportunity Site(s) (feet) |
|---|---|---|
| **GeoTracker** | | |
| Chualar River Road Disposal Site | 28 | 1,214 |
| | 29 | 1,207 |
| Falcon Trading – Maintenance Areas | 49 | 124 |
| | 50 | 325 |
| Monterey Regional Airport | 52 | 1,271 |
| Moreno Petroleum PFAS | 49 | 642 |
| | 50 | 921 |
| | 64 | 642 |
| **EnviroStor** | | |
| Fort Ord York School Agreement | 46 | 0 |
| | 47 | 540 |

Given the proximity of these hazardous sites to the opportunity sites where future residential development associated with the project may occur, buildout of these opportunity sites may have the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. In addition, several opportunity sites are in proximity to or overlap with certified, inactive, or previously closed hazardous sites that may also have residual contamination and existing land use controls (e.g., Soil Management Plans). Further, clean up at previously closed sites may have been conducted to meet standards for the existing land uses rather than the more stringent standards for residential uses. Grading and excavation in developed areas may expose construction workers and the public to known or potentially unknown hazardous materials in the soil or groundwater. Therefore, development on these sites have the potential to release hazardous materials into the environment.

Opportunity sites that are not and were never listed as hazardous sites may also have previously undiscovered soil or groundwater contamination, due to prior land uses (e.g., industrial or agricultural sites). Potentially hazardous materials that currently occur throughout Monterey County are commonly found in urban and agricultural areas and generally include cleaning and metal solvents, pesticides/herbicides, paints, oils, and lubricants. As described in Section 4.9.2.2, opportunity sites are located on existing agricultural land. As such, future housing development could occur on properties with prior releases of hazardous materials or wastes (e.g., sites included on the DTSC Cortese List pursuant to CGC Section 65962.5) or ongoing use of agricultural

chemicals (e.g., pesticides, insecticides, fertilizer). Therefore, future residential development would have the potential to expose these hazardous materials during construction activities (e.g., excavation, grading).

Some regulatory processes, including SARA, CWA/SPCC, OSHA standards, EHB Guidelines for Site Mitigation (County of Monterey 2025), and the County Code, would serve to minimize impacts of a potential release of hazardous materials from future development enabled under the HEU6. For example, SARA requires businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws to report this activity. This data is made available to federal authorities, local agencies, and the public to avoid accidental releases of hazardous materials. The CWA and SPCC Rule require facilities to prepare, amend, and implement SPCC plans that minimize the potential for discharges, particularly of oil. Further, OSHA requires safe work practices during construction activities. EHB Guidelines for Site Mitigation require preliminary site assessments, soil and groundwater investigations, corrective actions, and monitoring for cleanup of contaminated sites (County of Monterey 2025). Additionally, Chapter 16.10 of the County Code establishes special standards and procedures for digging and excavation within the former Fort Ord military installation in addition to those in the Building Code.

Where known soil or groundwater contamination exists, remediation would be required to satisfy the appropriate agencies—DTSC, RWQCB, and the County HMMS—through standard grading and building permit application processes and would prevent exposure of people and the environment to these hazards. Existing federal, state, and local regulations as well as site-specific remediation plans and requirements mandated by existing regulations (e.g., Unified Program) and enforced by regulatory agencies and CUPAs, address remediation requirements following the discovery of contamination; however, opportunity sites located on active or historical industrial or agricultural sites have not all been investigated for the presence of hazardous materials. Without site-specific assessment, contamination from operation of industrial or agricultural uses could be released into the environment or, upon future occupation, cause a hazard to the public due to exposure to hazardous materials above applicable regulatory exposure limits.

Mitigation Measure (MM-) HAZ-OBJ-1 and MM-HAZ-CONS-2 would require the preparation of a project-specific Phase I Environmental Site Assessment (ESA) for all opportunity sites that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses. MM-HAZ-OBJ-1 would apply for by-right housing developments streamlining under the Objective Process and MM-HAZ-CONS-2 would apply for discretionary housing developments streamlining under the Consistency Process of the HEU6. The Phase I ESA would identify the presence of specific contamination or potentially hazardous substances on or near each individual site, which may require further sampling by a qualified hazardous materials Environmental Professional. If either no specific recognized environmental conditions (RECs) are

identified or no further sampling and/or testing is required to evaluate or remediate the RECs, this impact would be considered mitigated to a less than significant level. If specific RECs are identified in the Phase I ESA that require further sampling and/or testing to evaluate, a Phase II ESA would be prepared to investigate specific RECs and recommend remedial activities to ensure that no RECs result in concentrations of contaminants above acceptable health-based screening levels for residential exposure through implementation of MM-HAZ-OBJ-3 and MM-HAZ-CONS-4. The investigation and subsequent remedial actions would be strictly controlled by federal, state, and local regulations (Section 4.9.1, Regulatory Setting). MM-HAZ-OBJ-3 and MM-HAZ-CONS-4 would require that all construction activities cease near the contamination until an investigation is conducted and a soil management plan or remediation plan is prepared. MM-HAZ-OBJ-5 and MM-HAZ-CONS-6 would require soil sampling for areas requiring remediation as identified through the Phase II ESA required under MM-HAZ-OBJ-3 and MM-HAZ-CONS-4. Through the review for hazardous materials contamination in soil, soil vapor, or groundwater as required under MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-CONS-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6, the County would assess and require avoidance of disturbance during construction pursuant to federal, state, and local laws and regulations. Therefore, with the implementation of the mitigation measures described above, impacts would be reduced to a less than significant level.

### Asbestos-Containing Material and Lead-Based Paint

Demolition of existing structures (particularly those developed before the 1980s) could result in the release of ACM or LBP that could result in potential exposure of workers or residents living near these opportunity sites to these hazardous materials. However, demolition of structures throughout Monterey County for future development would be required to comply with the existing federal, state, and regional rules and regulations related to testing and removal of ACM and LBP through the building permit process. For example, Monterey Bay Air Resources District Rule 424 helps implement the National Emissions Standard for Hazardous Air Pollutants (NESHAP) by requiring a third-party California-certified asbestos consultant to complete a thorough inspection for the presence, quantity, and categories of ACM prior to commencement of any building renovation or demolition, regardless of the age of the building. In lieu of a survey, all suspect building materials may be assumed to be asbestos and must be treated properly according to applicable regulations. The NESHAP, federal OSHA, Cal/OSHA, and California Health and Safety Code include requirements for emission controls and waste disposal during removal of ACM. In addition to asbestos surveys, NESHAP includes requirements for notifications prior to beginning a renovation or demolition project, work practice standards, and ACM disposal. Cal/OSHA requires that contractors with specialized asbestos training and who are registered with Cal/OSHA must be used for asbestos removal projects. Contractors without special asbestos training must ensure that the job site is free of ACM before starting renovation or demolition work. The NESHAP requires that asbestos-containing waste materials be sealed in leak-tight, properly

labeled containers and disposed of only at approved sites. Similarly, OSHA requires safe work practices during demolition and renovation, worker training, disposal of asbestos waste, and specification of permissible exposure limits pursuant to 29 CFR 1926.1101.

Additionally, the USEPA and U.S. Department of Housing and Urban Development developed regulations for disclosing the presence of LBP for housing built before 1977 and federally funded housing. The USEPA's Lead-Based Paint Abatement Program regulations provide a framework for lead abatement, risk assessment and inspections. Those performing these services are required to be trained and certified by the USEPA or an authorized state. The County Health Department operates the Lead Litigation Mitigation Program, which provides surface lead testing and helps with remediation, repairs, and abatements of lead hazards in homes that were built prior year 1978 and/or contain LBP, at no cost to the property owners or residents. With implementation of existing regulatory requirements, the project would have less than significant impacts related to ACM and LBP.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Phase I ESAs, and Phase II ESAs and soil sampling as needed, would be required for HEU6 residential projects that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses through MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-CONS-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6 below.

**MM-HAZ-OBJ-1: Phase I Environmental Site Assessment.** Applicants for by-right housing developments on opportunity sites that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses shall retain a qualified hazardous materials environmental professional to prepare a Phase I Environmental Site Assessment (ESA). If the applicant can provide substantial evidence to the Monterey County (County) Public Works, Facilities, and Parks Department, Environmental Health Bureau (EHB) that the opportunity site is not within 0.25 mile of a listed hazardous site or has not historically supported or currently supports industrial or agricultural uses, then a Phase I ESA would not be required.

The Phase I ESA shall be prepared in accordance with American Society for Testing and Materials (ASTM) Standard Practice E1527-21 or the Standards and Practices for All Appropriate Inquiry, prior to construction and demolition activities and submitted to the County Housing and Community Development Department Building Services as part of project application materials. The Phase I ESA shall identify specific recognized environmental conditions (RECs), if present, which may require further sampling and

remedial activities by a qualified hazardous materials environmental professional with Phase II site characterization experience. The environmental professional shall identify proper remedial activities (e.g., capping, excavation of contaminated soil, and bioventing) to be implemented by the applicant or its designee, if necessary. If the Phase I ESA requires further sampling and/or testing to evaluate RECs, a Phase II ESA or other similar subsequent site assessment documents shall be prepared by a qualified hazardous materials Environmental Professional.

**MM-HAZ-CONS-2: Phase I Environmental Site Assessment.** Applicants for developments streamlining under the Consistency Process on opportunity sites that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses shall be required to prepare and submit a Phase I Environmental Site Assessment (ESA) to the Monterey County (County) Housing and Community Development Department Building Services as part of the development application package to determine the potential for recognized environmental conditions (RECs) on the site. If the Phase I ESA requires further sampling and/or testing to evaluate RECs, a Phase II ESA or other similar subsequent site assessment documents shall be prepared by a qualified hazardous materials Environmental Professional, as described further in MM-HAZ-CONS-C, below.

Refer to MM-HAZ-OBJ-1, above, for all standards and requirements for MM-HAZ-CONS-2.

**MM-HAZ-OBJ-3: Phase II Environmental Site Assessment.** If a Phase II Environmental Site Assessment (ESA) is required, the Phase II ESA shall be prepared in accordance with American Society for Testing and Materials (ASTM) Standard Practice E1903-19, prior to construction and demolition activities and submitted to the County of Monterey (County) as part of project application materials. The Phase II ESA shall find concentrations of contaminants to be within acceptable health-based screening levels for residential exposure. Areas of above-acceptable health-based screening levels for residential exposure shall be defined and remediated to below the acceptable level of concern, and the project proponent/applicant shall prepare a remedial action plan (RAP). The remedial activities shall be reviewed and approved by the appropriate approval agency (e.g., California Department of Toxic Substances Control, Regional Water Quality Control Board, County Environmental Health Bureau – Hazardous Materials Management Services) prior to issuance of a grading permit for an affected area. Remediation may include excavation and disposal of impacted soil to an off-site approved hazardous waste facility, bioremediation, chemical oxidation, capping, etc. The construction contractor shall implement the recommendations outlined in the RAP.

**MM-HAZ-CONS-4: Phase II Environmental Site Assessment.** If a Phase II Environmental Site Assessment (ESA) is required, the Phase II ESA shall be prepared in accordance with American Society for Testing and Materials (ASTM) Standard Practice E1903-19, prior to construction and demolition activities and submitted to the County as part of project application materials.

Refer to MM-HAZ-OBJ-3, above, for all standards and requirements for MM-HAZ-CONS-4.

**MM-HAZ-OBJ-5: Confirmation Sampling.** Verification soil sampling (confirmation sampling) shall be conducted after remediation of impacted soils that exceeded the approved Remedial Action Plan (RAP) criteria. Verification sampling shall be conducted under the direction of the regulatory oversight agency representative (e.g., California Department of Toxic Substances Control, Regional Water Quality Control Board, County Hazardous Materials Management Services) and shall be collected and analyzed in compliance with the approved RAP or as directed by the regulatory oversight agency. Verification soil sampling shall continue regularly until remediation efforts are successful and impacted soils no longer exceed the approved RAP criteria. At completion of the site remediation, if the remediation oversight agency is not the Monterey County Environmental Health Bureau (EHB) – Hazardous Materials Management Services, clearance documentation or site closure letter shall be submitted to the County EHB – Hazardous Materials Management Services prior to the issuance of building permits and submitted to the County as part of project application materials.

**MM-HAZ-CONS-6: Confirmation Sampling.** Verification soil sampling (confirmation sampling) shall be conducted after remediation of impacted soils that exceeded the approved Remedial Action Plan (RAP) criteria under the direction of the regulatory oversight agency representative (e.g., California Department of Toxic Substances Control, Regional Water Quality Control Board, County Hazardous Materials Management Services). At completion of the site remediation, if the remediation oversight agency is not the Monterey County Environmental Health Bureau (EHB) – Hazardous Materials Management Services, clearance documentation or site closure letter shall be submitted to the County EHB – Hazardous Materials Management Services prior to the issuance of building permits and submitted to the County as part of project application materials.

Refer to MM-HAZ-OBJ-5, above, for all standards and requirements for MM-HAZ-CONS-6.

## Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.9.5.3 Threshold 3: Proximity to Schools

**Threshold 3:** Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

### Impact Analysis

Some of the opportunity sites (Opportunity Sites 1 through 4, 8, 9, 14, 15, 25, 26, 27, 28, 30, 32 through 34, 37, 38, 41, 43, 44, 46, 47 through 51, and 53) are on or within 0.25 mile of existing school sites (refer to Table 4.9-3). Project construction would include the handling of hazardous materials, substances, and waste. Construction activities would require the operation of heavy equipment (e.g., dozers, excavators, tractors) that would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the opportunity sites during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, nearby schools, the public, and the environment. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the USEPA, DTSC, and Central Coast RWQCB. Water quality regulations are further discussed in Section 4.10, Hydrology and Water Quality, of this PEIR. Air quality health risks are discussed further in Section 4.3, Air Quality, of this PEIR.

Additionally, the project involves development of residential units, the operation of which would require routine cleaning and maintenance activities using common hazardous materials, such as cleaning fluids, detergents, solvents, adhesives, sealers, paints, fuels/lubricants, and pesticides/herbicides. However, usage would not be at levels that would result in substantial hazardous emissions or waste. Therefore, implementation of the project would not result in an impact associated with hazardous emissions or handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.9.5.4 Threshold 5: Airport Land Use Compatibility

**Threshold 5:** For a project in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

### Impact Analysis

Opportunity Sites 31 and 53 are within Zone 7 (AIA) of the Marina Municipal Airport (Figure 4.9-2a), a portion of Opportunity Site 46 is within Zone 4 (OADZ) of the Monterey Regional Airport (Figure 4.9-2b), and the remainder of Opportunity Site 46, as well as the whole of Opportunity Sites 47 and 52, is within Zone 7 (AIA) of the Monterey Regional Airport (Figure 4.9-2b; City of Marina 2006; Monterey County ALUC 2019).

#### *Safety Hazards*

State statutes define an AIA as "the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission." Therefore, there is potential for future residential projects at Opportunity Sites 31, 46, 47, 52, and 53 to significantly affect or be affected by airport operations.

Future development projects at these sites would be required to comply with applicable restrictions related to land uses, density, vulnerable occupants, and noise to avoid safety hazards to aircraft and people from the airport operations. For instance, Opportunity Sites 31, 47, 52, and 53 are within Zone 7 (the AIA) of the airports and therefore, would require a height limit of 100 feet above the established airport elevation, 10 percent open land, and no physical, visual, or electronic forms of interference with the safety of aircraft operations. There is no limit on the number of residential dwelling units per acre allowed in the AIA; however, there is a maximum non-residential intensity limit of 300 persons per acre. Future residential development on these opportunity sites would be required to comply with the safety criteria identified in the ALUCPs for Marina Municipal Airport and Monterey Regional Airport or would need to file a Notice of Intent to Overrule an ALUC Determination for approval by the Board of Supervisors, ALUC, and Caltrans Division of Aeronautics. A Notice of Intent to Overrule an ALUC Determination is required when a local agency (city or county) decides to approve a project, general plan, or zoning ordinance that the ALUC has deemed inconsistent with its ALUCP (California Public Utilities Code, Section 21676). This process requires the Board of Supervisors to adopt a resolution of intent to overrule the ALUC determination and send the formal notice to the ALUC and Caltrans Division of Aeronautics. The ALUC and Caltrans may submit comments on compatibility determinations within 30 days of receiving the

notice, which the council must consider. A public hearing to finalize the override cannot occur for at least 45 days after the notice is sent. Once the ALUC and Caltrans submit comments, a two-thirds majority vote is required by the Board of Supervisors to formally overrule the ALUC (California Public Utilities Code, Section 21676; Caltrans 2026). In addition to the Notice of Intent to Overrule an ALUC Determination, developers proposing structures that could penetrate 14 CFR Part 77 elevations must file Form 7460 with the FAA.

As described further in Section 4.11, Land Use and Planning, the HEU6 incorporates measures specifically intended to ensure consistency with the Marina Municipal and Monterey Regional ALUCPs and avoid conflicts with airport safety and compatibility policies. Program H-3.C, Zoning Ordinance Amendments for Opportunity Sites, requires the County to amend zoning designations and establish detailed overlay boundaries for airport influence and safety zones using the ALUCP influence zones, FAA Part 77 surfaces, and topographic data. Consistent with Program H-3.C, Opportunity Site 47 would be split zoned between HDR/30 and Public/Quasi-Public to ensure consistency with airport compatibility requirements. Future development on Opportunity Sites 31, 47, 52, and 53 would remain subject to ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions.

A large portion of Opportunity Site 46 is within Zone 4 (the OADZ) of the Monterey Regional Airport, while the remainder of Opportunity Site 46 is within Zone 7 (the AIA). Restrictions within this airport safety zone include a maximum residential development density of one dwelling unit per 2 acres, a maximum non-residential intensity limit of 150 persons per acre, a height restriction of 70 feet tall, and a requirement of 20 percent open land. Consistent with Program H-3.C of the HEU6, Opportunity Site 46 would be split zoned such that the portion within Zone 4 would remain designated Public/Quasi-Public, while only the portion within Zone 7 would be redesignated to HDR/30. Future residential development on Opportunity Site 46 would be required to either comply with the safety criteria identified in the ALUCPs for Monterey Regional Airport or file a Notice of Intent to Overrule an ALUC Determination for approval by the Board of Supervisors, ALUC, and Caltrans' Division of Aeronautics.

The HEU6 incorporates zoning limitations and implementation measures specifically intended to maintain consistency with the Marina Municipal and Monterey Regional ALUCPs, and future development would remain subject to ALUC review and applicable airport compatibility requirements. Given the split zoning proposed for Opportunity Sites 46 and 47 to ensure consistency with airport compatibility requirements, all development under the HEU6 would occur within Zone 7 (the AIA). As previously described, Zone 7 is the one airport safety zone that the Marina Municipal and Monterey Regional ALUCPs consider the aircraft accident risk level to be low.

Portions of the UMC contain steeper and higher terrain elevations that penetrate Part 77 surfaces or could penetrate Part 77 surfaces if developed. Specifically, portions of Opportunity Sites 46 and

47 currently penetrate Part 77 surfaces. As part of the rezoning process, the County will ensure that the development standards for sites that have specific density and development-related considerations be rezoned to be consistent with the requirements of the applicable ALUCP. The ALUC reviewed the proposed opportunity sites and HEU6 in January and December 2025. During their review, the ALUC determined the potential housing sites are consistent with noise and safety airport compatibility and airspace protection requirements on Opportunity Sites 31 and 53 and therefore consistent with ALUCP standards. Sites 46 and 47 are proposed to be split zoned and appropriate development standards applied to the sites to ensure consistency with the requirements of the applicable ALUCP. Therefore, implementation of the HEU6 would not result in a safety hazard for people residing or working in the project area due to conflict with the Marina Municipal or Monterey Regional ALUCPs.

Additionally, as these sites are within 2 miles of airports, real estate disclosure is required under California Business and Professions Code, Sections 11010(a) and 11010(b)(13); California Civil Code, Sections 1102.6, 1103.4, and 1353; and California Code of Civil Procedure, Section 731(a). As such, any person who offers residential property for sale or lease must disclose the proximity of the airport to the property.

#### *Excessive Noise*

According to Exhibits 2D and 2E of the Marina Municipal ALUCP, Opportunity Sites 31 and 53 are outside the outermost noise contour (55 Community Noise Equivalent Level [CNEL]). As such, noise generated by the airport would be less than 55 CNEL at the nearest receptor. Additionally, according to Exhibits 2D and 2E of the Monterey Regional ALUCP, Opportunity Site 46, 47, and 52 are also outside Monterey Regional Airport's outermost noise contour (65 CNEL). As such, noise generated by the airport would be less than 65 CNEL at the nearest receptor, consistent with the County's acceptable ambient noise levels for residential uses (Table 4.13-2 in Section 4.13, Noise). Therefore, implementation of HEU6 would not result in excessive noise for those residing or working in the project area.

Therefore, the project would not result in a safety hazard or excessive noise for those residing or working in the project area. Impacts would be less than significant with implementation of ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.9.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to hazards and hazardous materials that could result from implementation of the project.

### 4.9.6.1 Cumulative Threshold 1: Routine Transport, Use, or Disposal of Hazardous Materials

Cumulative impacts related to the routine transport, use, or disposal of hazardous materials could occur if the project, in combination with other cumulative projects, incrementally lead to a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. It is possible for projects throughout Monterey County to occur near each other and simultaneously, which, for example, would lead to an increase in projects that involve the routine transport, use, or disposal of hazardous materials in an area with multiple ongoing construction projects. Just as future development facilitated by the project would be required to comply with federal, state, and local regulations for transport, use, or disposal of hazardous materials, it is reasonable to assume that cumulative projects would be subject to the same or similar standards. Therefore, the use, handling, and transportation of potentially hazardous materials, substances, or waste would be addressed on a project-by-project basis, with each potential project complying with all regulatory requirements. Therefore, cumulative impacts on the routine transport, use, or disposal of hazardous materials would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

### 4.9.6.2 Cumulative Threshold 2 and Threshold 4: Release of Hazardous Materials and Hazardous Sites

Cumulative impacts related to release of potentially hazardous materials could occur if the project, in combination with other cumulative projects, incrementally lead to a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. It is possible for projects throughout

Monterey County to occur near each other and simultaneously, which, for example, would lead to an increase in potential for hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste in an area with multiple ongoing construction projects. Just as future development facilitated by the project would be required to comply with federal, state, and local regulations for surveys, testing, remediation, and disposal, it is reasonable to assume that cumulative projects would be subject to the same or similar standards. MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6 would apply to all future residential development enabled under the project that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses. Therefore, the use, handling, and transportation of potentially hazardous materials, substances, or waste would be addressed on a project-by-project basis, with each potential project complying with all regulatory requirements (e.g., 26 CCR 26; California Health and Safety Code, Chapter 6.95, Article 1 and Article 2; County Code Chapter 10.65). Refer to Section 4.9.1 for a full discussion of the applicable regulatory requirements. Cumulative projects occurring in incorporated cities within Monterey County would be required to comply with federal and state regulations, as well as their respective local regulations related to hazards materials and sites. Therefore, cumulative impacts on release of hazardous materials or disturbance of hazardous sites would be less than significant with mitigation.

#### Significance of Impact

Potentially significant impact.

#### Mitigation Measures

Refer to MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6.

#### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.9.6.3 Cumulative Threshold 3: Proximity to Schools

Cumulative impacts on release of potentially hazardous materials could occur if the project, in combination with other cumulative projects, incrementally lead to improper use, handling, or transportation of potentially hazardous materials within 0.25 mile of an existing or proposed school. It is possible for projects throughout Monterey County to occur near each other and simultaneously, which, for example, would lead to an increase in potential for hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste in an area with multiple ongoing construction projects. Just as future development facilitated by the project would be required to comply with federal, state, and local regulations for surveys, testing, remediation, and disposal, it is reasonable to assume that cumulative projects would be subject to the same or similar

standards. Therefore, the use, handling, and transportation of potentially hazardous materials, substances, or waste would be addressed on a project-by-project basis, with each potential project complying with all applicable regulatory requirements. Therefore, cumulative impacts related to improper use, handling, or transportation of potentially hazardous materials within 0.25 mile of an existing or proposed school would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.9.6.4 Cumulative Threshold 5: Airport Land Use Compatibility

Impacts related to safety hazards and excessive noise from airport operations are location-specific and should be evaluated on a project-by-project basis. It is possible for projects throughout Monterey County to occur near each other and airports, which, for example, would lead to an increase in potential for safety hazards or excessive noise for people residing or working in the area. For example, cumulative projects occurring in incorporated cities within Monterey County may occur in proximity to the Marina Municipal Airport or Monterey Regional Airport. Just as future development facilitated by the project would be required to comply with federal, state, and local regulations for ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions, cumulative projects would be subject to the same or similar standards. Therefore, safety hazards and excessive noise from airport operations would be addressed on a project-by-project basis, with each potential project complying with all regulatory requirements. Therefore, cumulative impacts related to safety hazards and excessive noise from airport operations would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

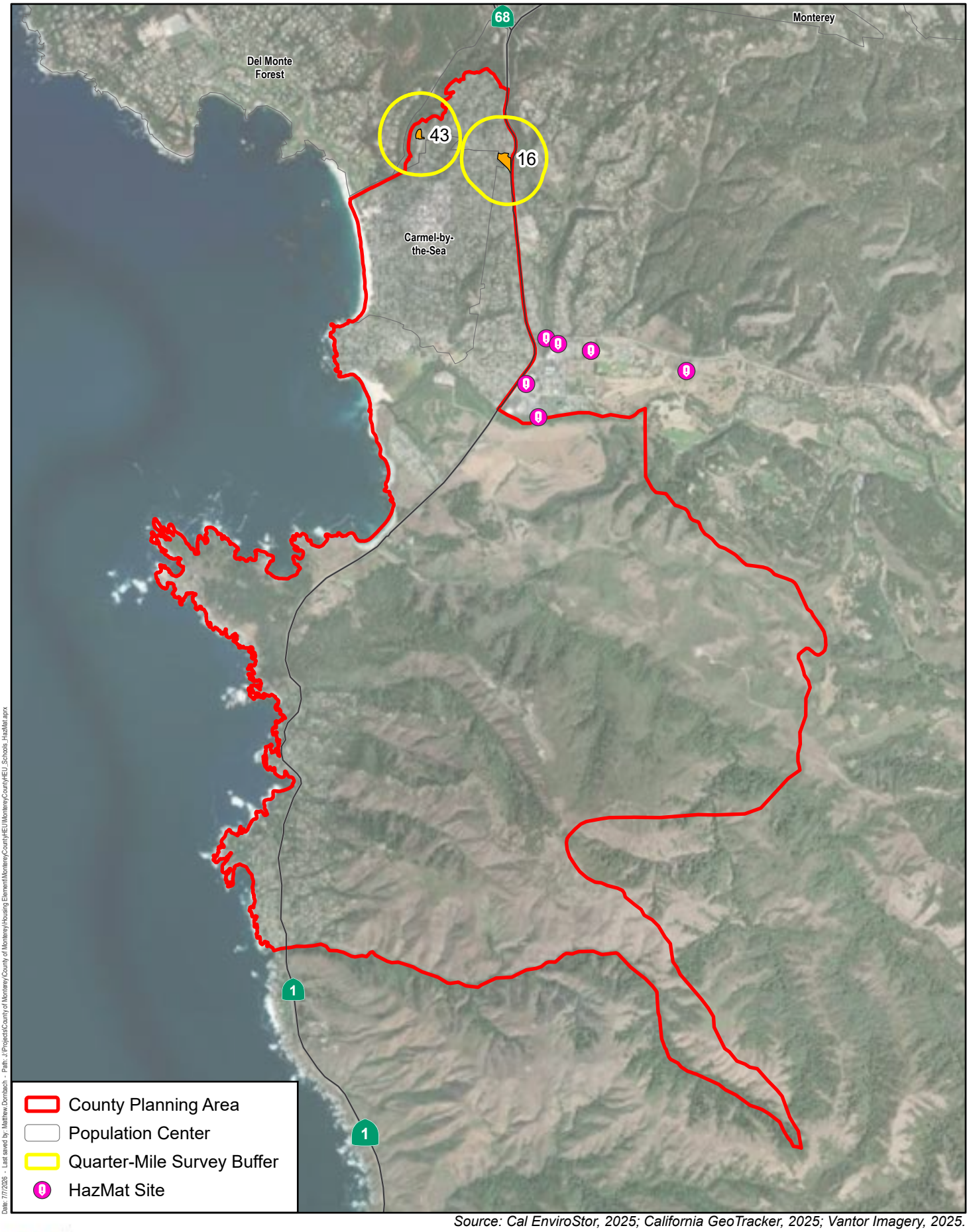
### Significance of Impact After Mitigation

Less than significant impact.

## 4.9.7 Conclusion

Implementation of MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6 would reduce potential impacts pertaining to hazards and hazardous materials to a less than significant level.

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*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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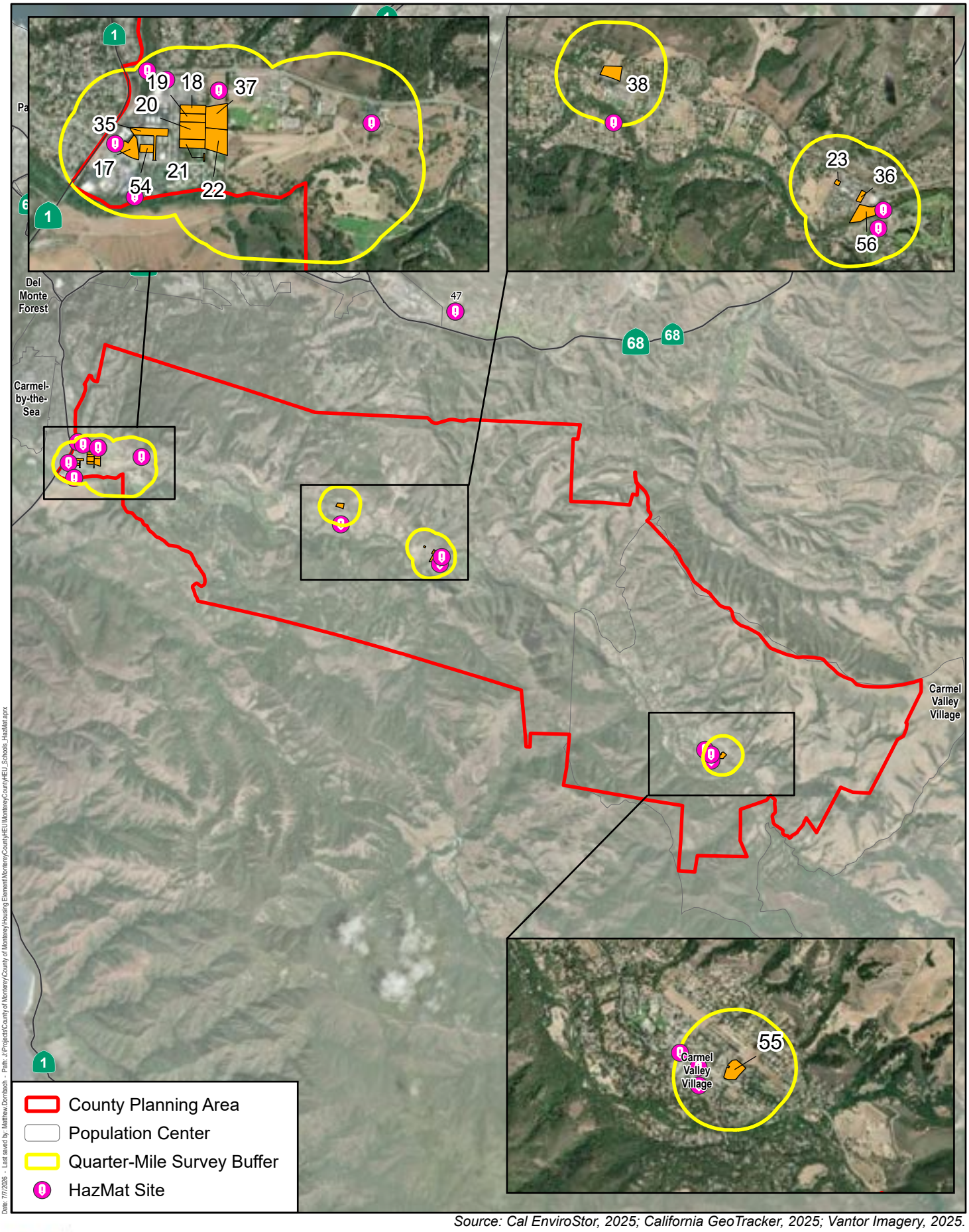
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**Figure 4.9-1a**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Carmel Area Land Use Plan

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*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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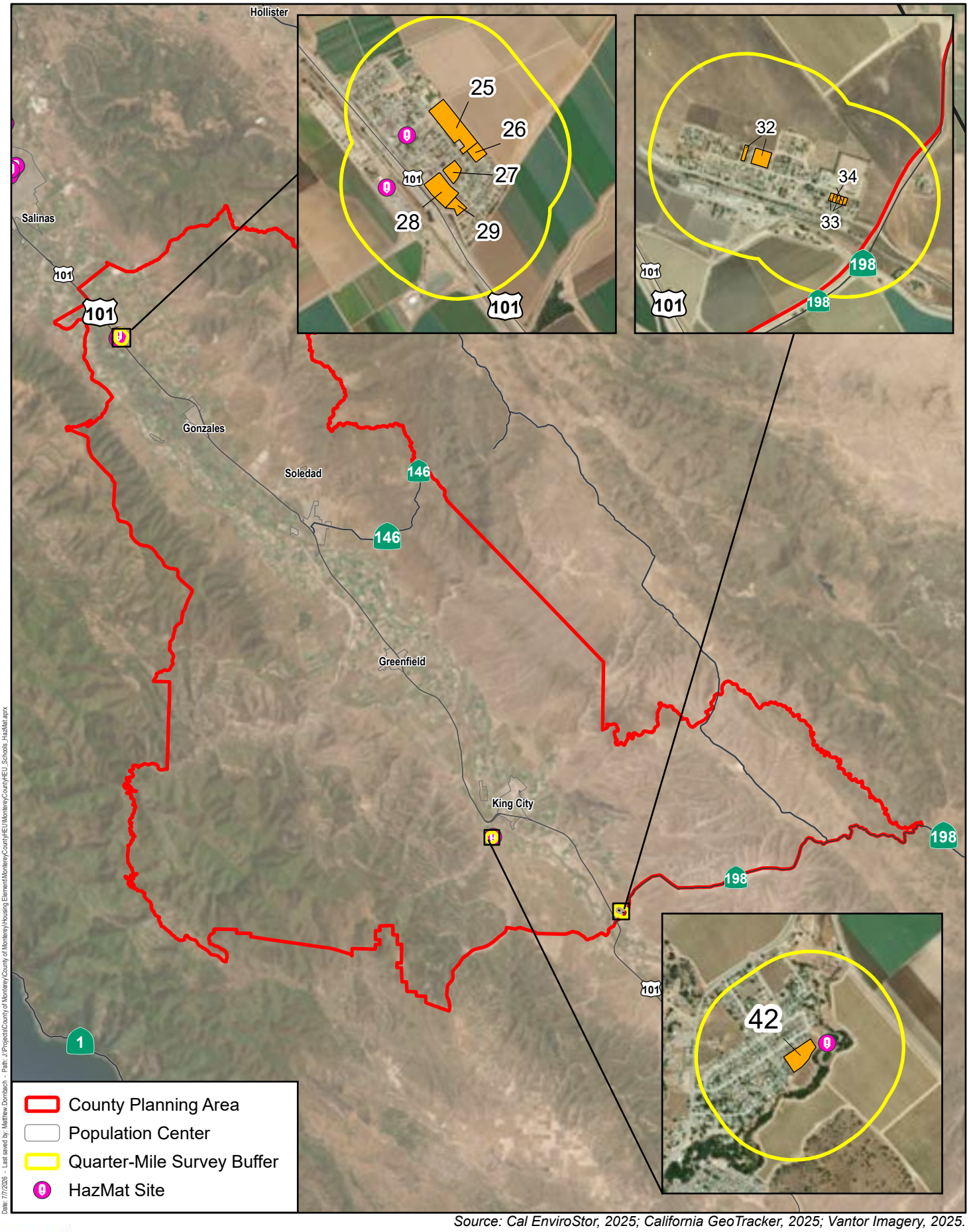
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Miles

**Figure 4.9-1b**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Carmel Valley Master Plan

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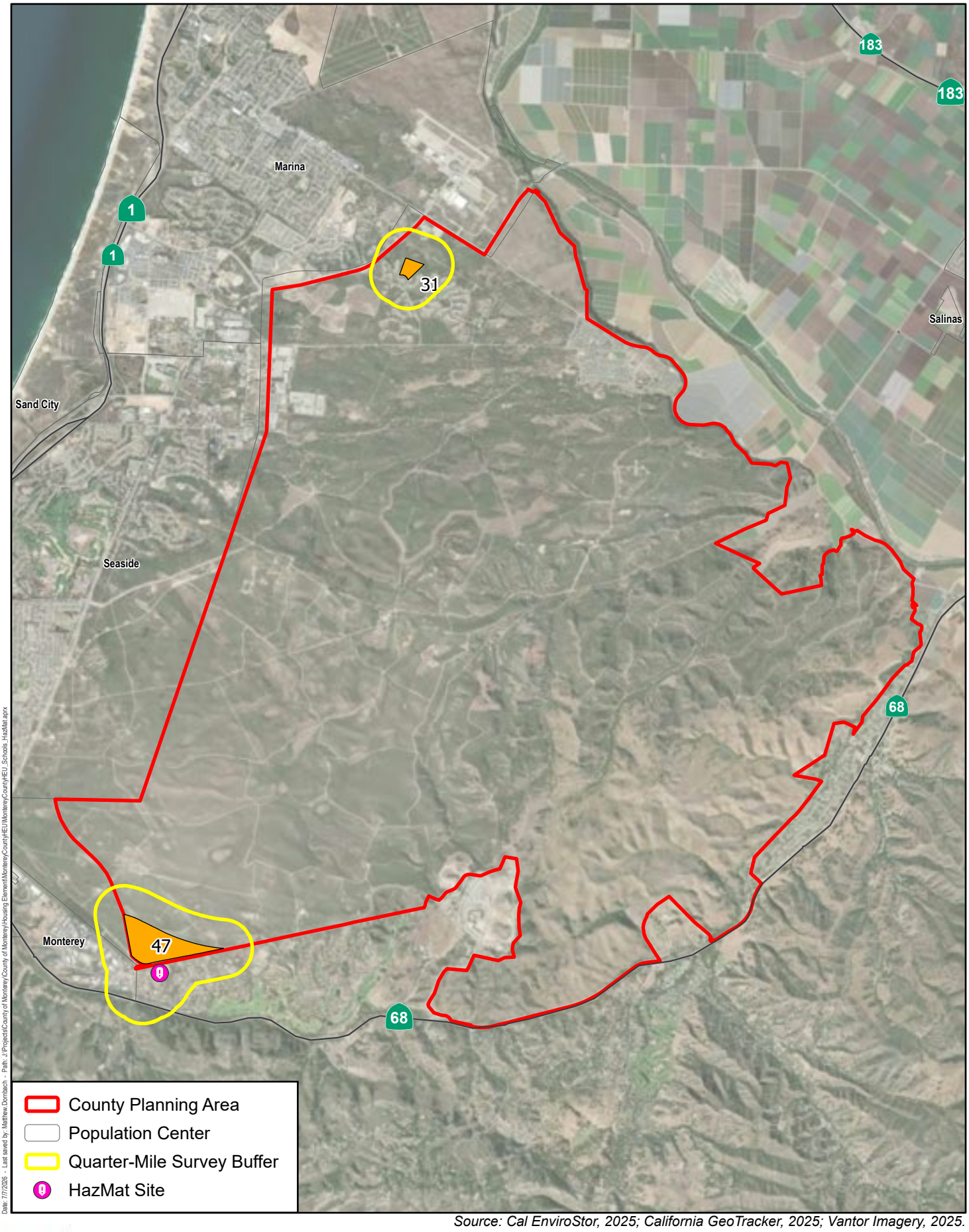

*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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**Figure 4.9-1c**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Central Salinas Valley Area Plan

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*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

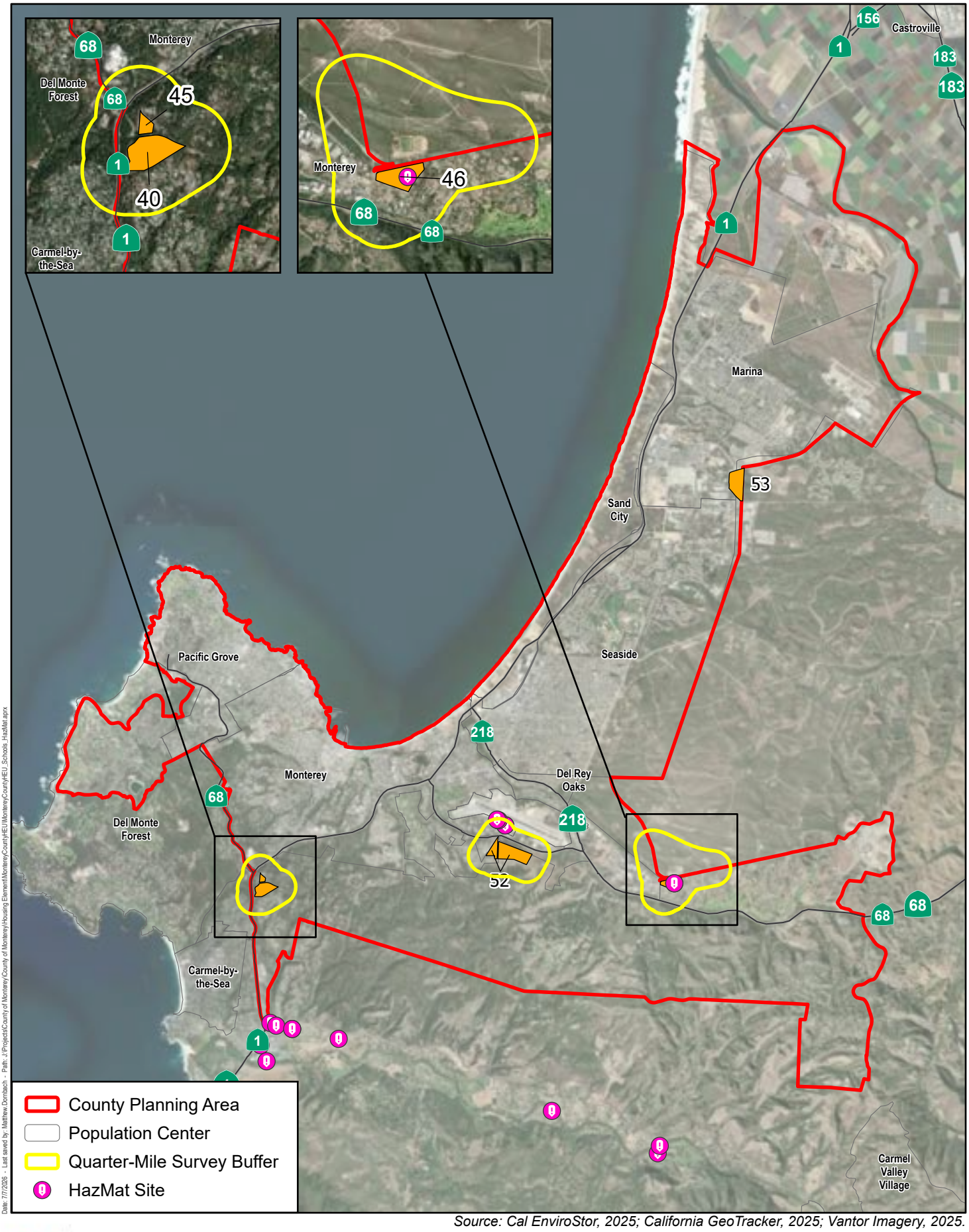
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**Figure 4.9-1d**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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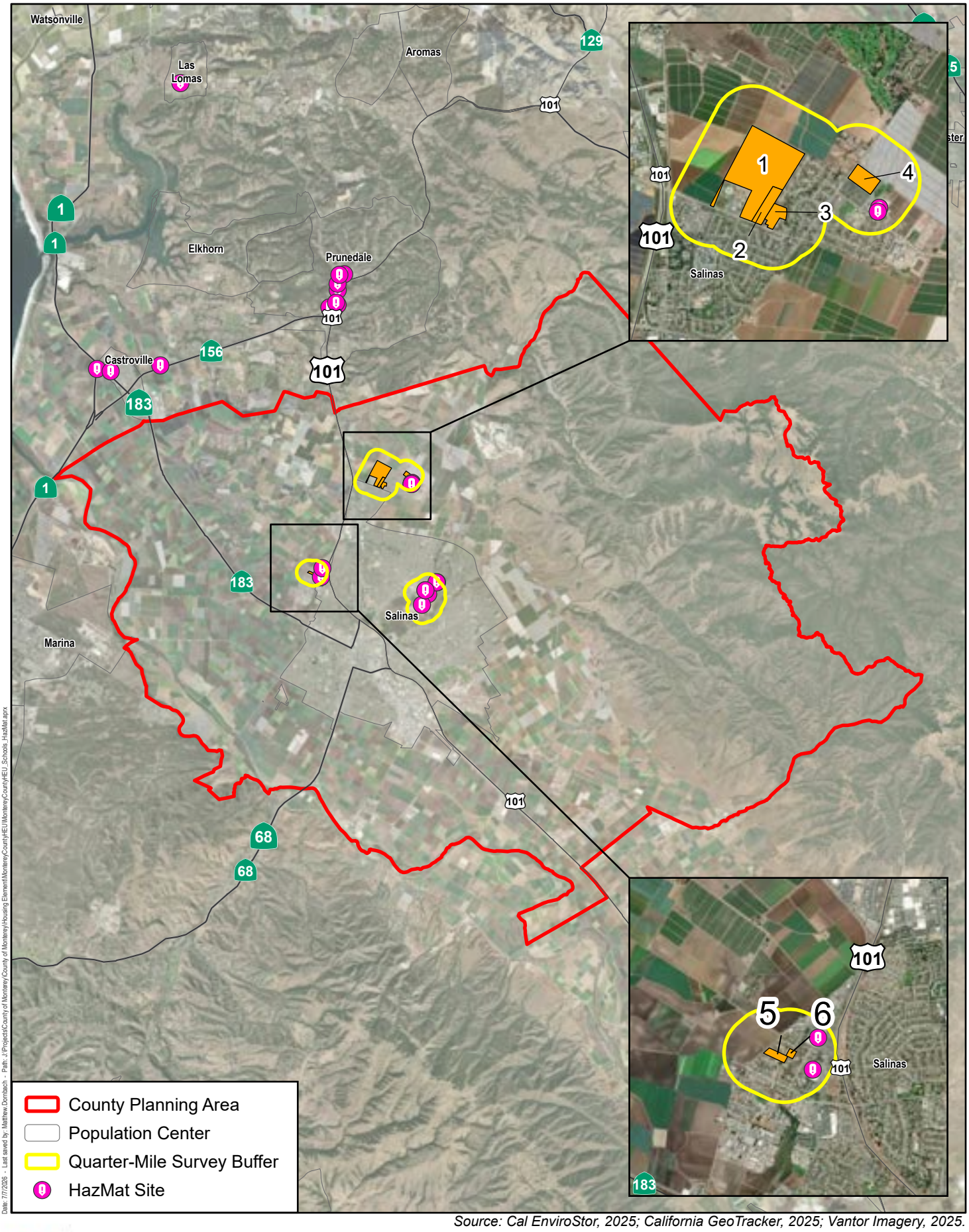

*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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**Figure 4.9-1e**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Greater Monterey Peninsula Area Plan

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*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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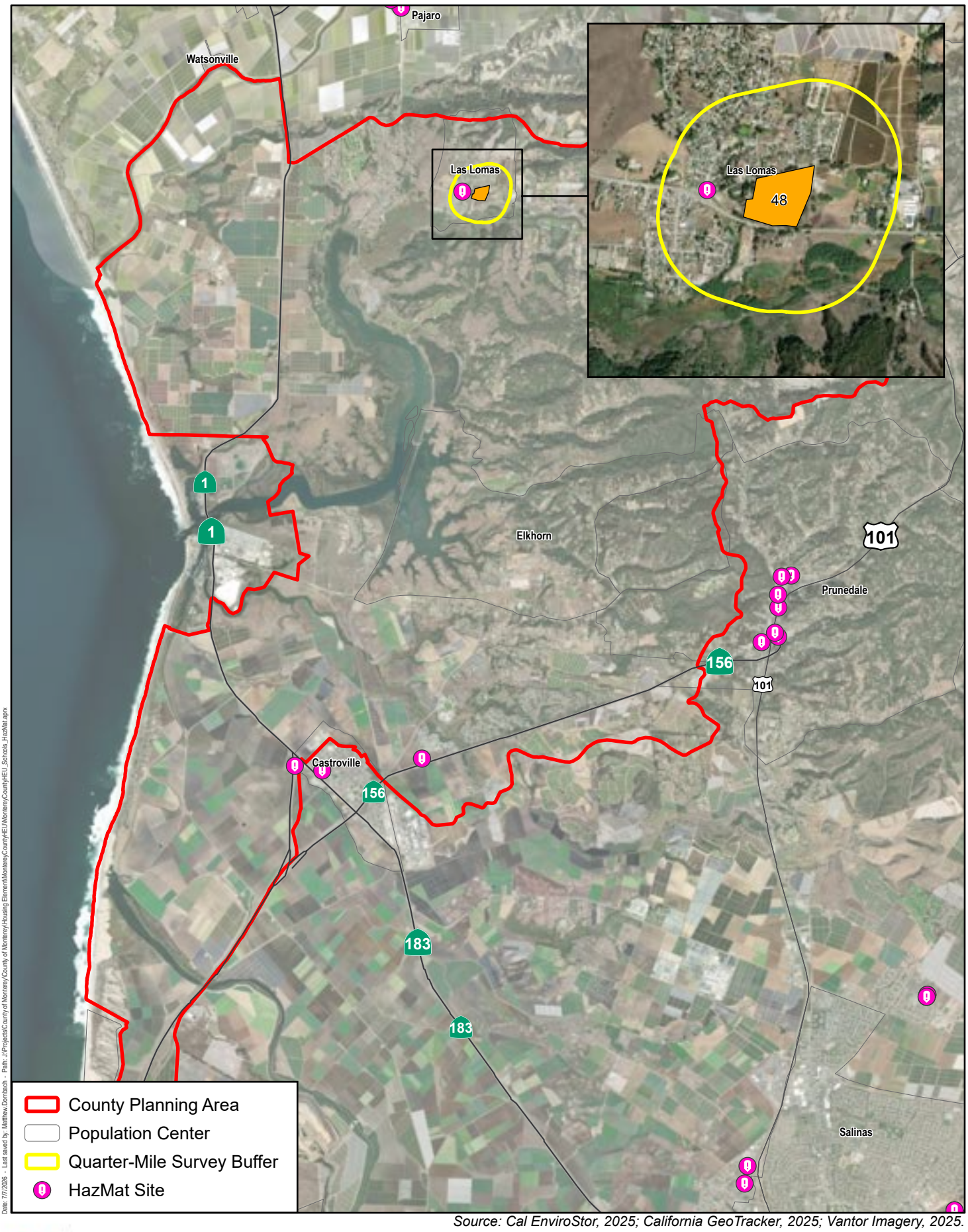
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**Figure 4.9-1f**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Greater Salinas Area Plan

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Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.

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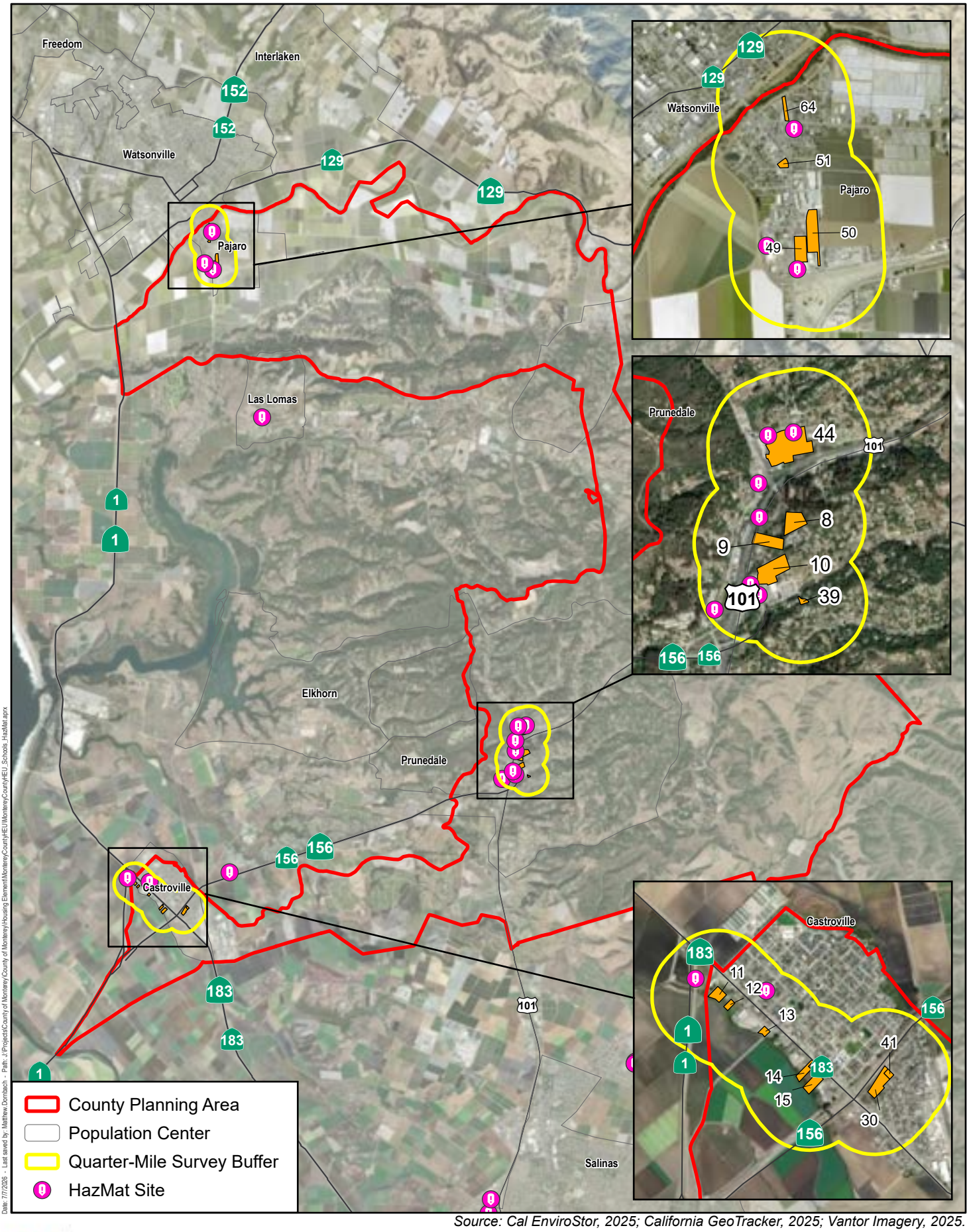
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**Figure 4.9-1g**

Hazardous Materials Sites in Proximity to Opportunity Sites in the North County Land Use Plan (Coastal)

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Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.

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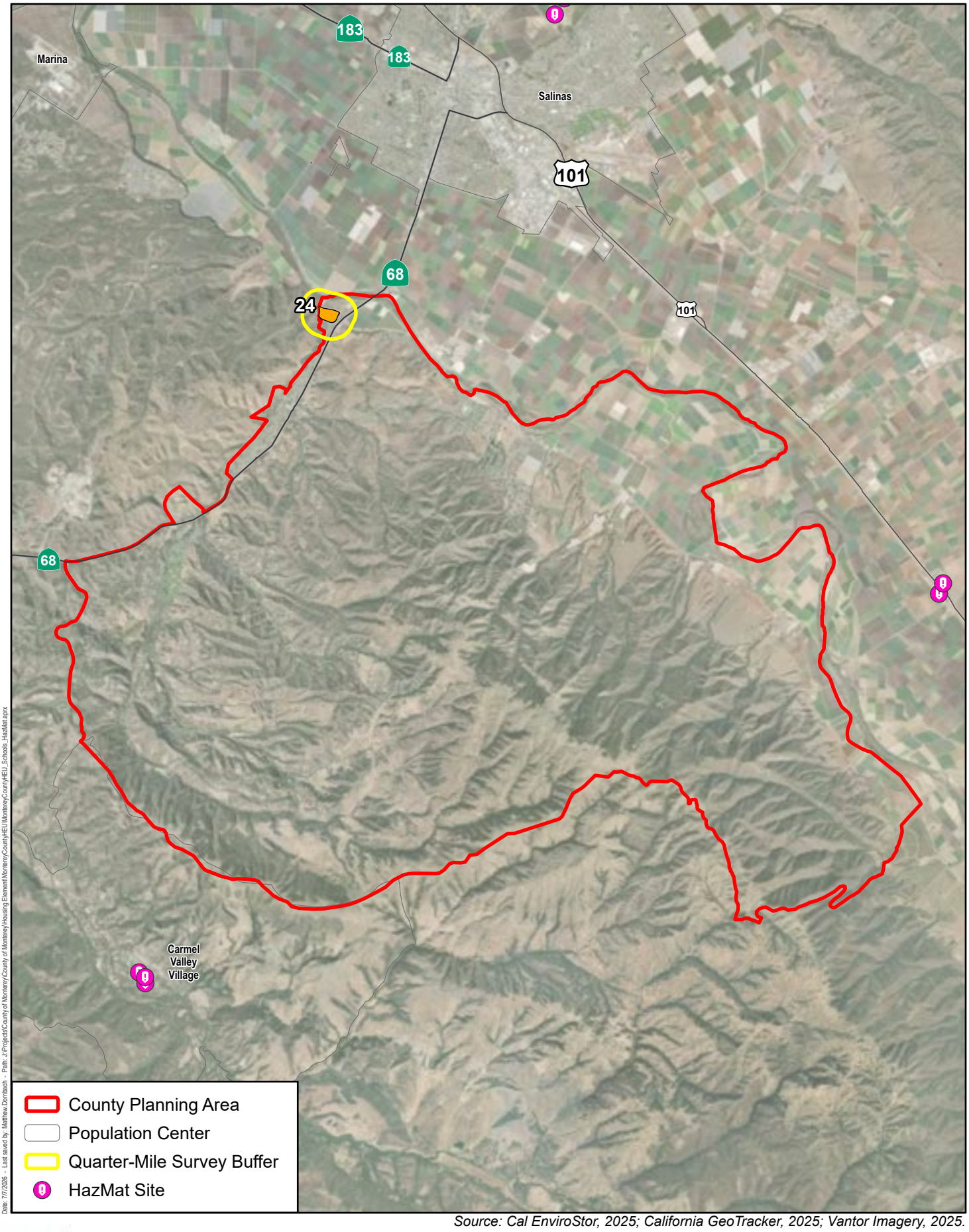
**Figure 4.9-1h**

Hazardous Materials Sites in Proximity to Opportunity Sites in the North County Area Plan (Inland)



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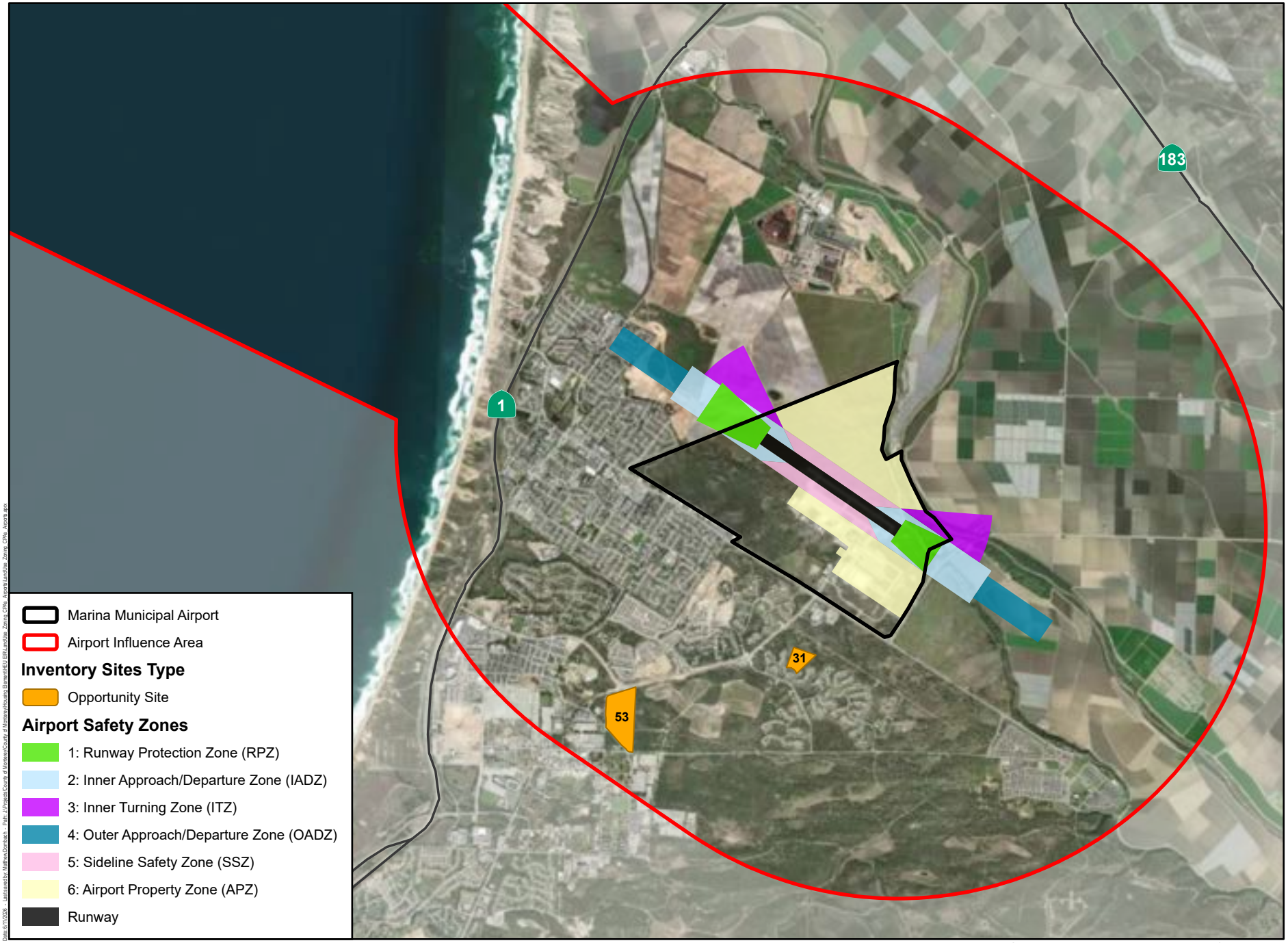
*Source: Cal EnviroStor, 2025; California GeoTracker, 2025; Vantor Imagery, 2025.*

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**Figure 4.9-1i**

Hazardous Materials Sites in Proximity to Opportunity Sites in the Toro Area Plan

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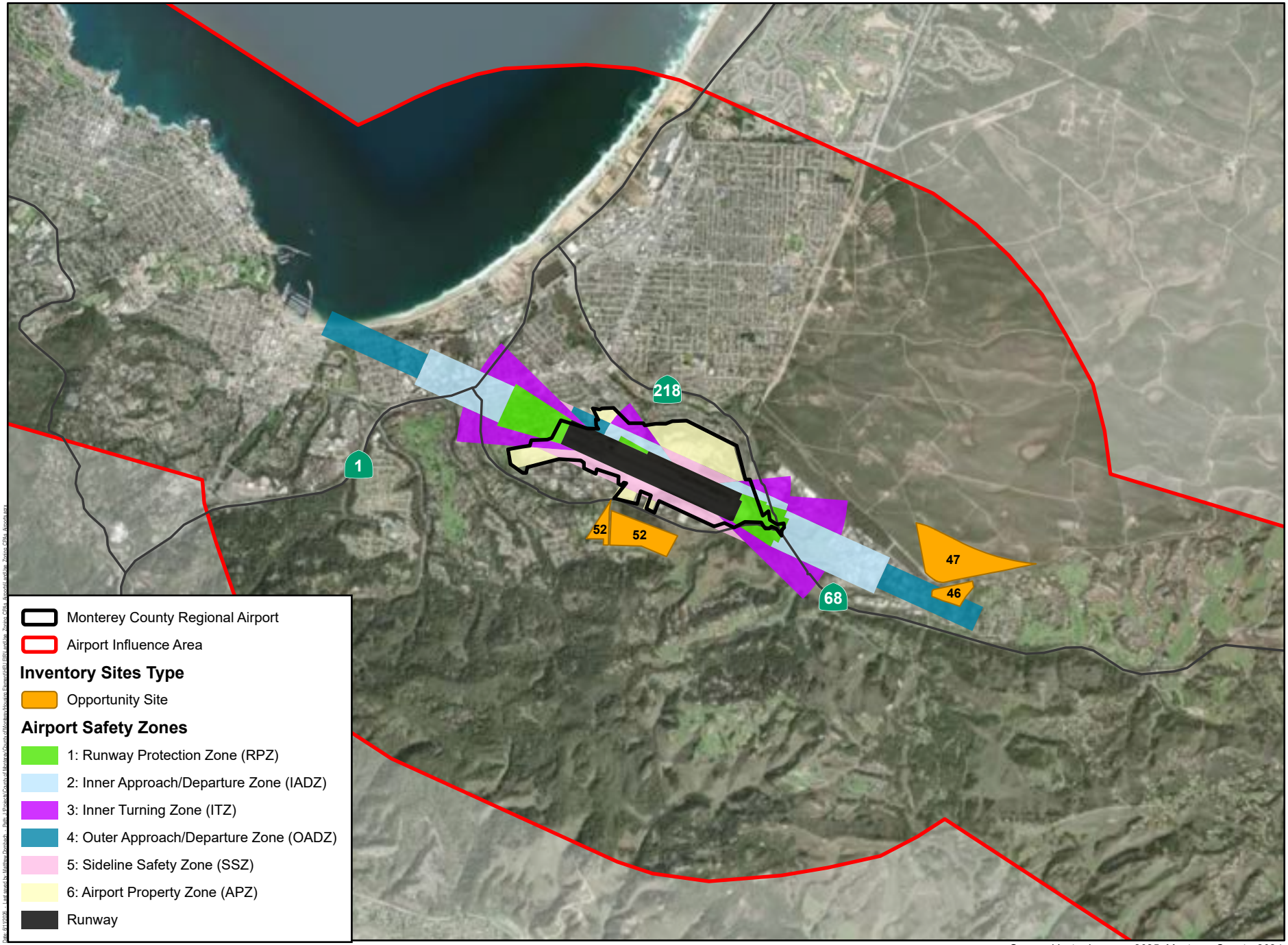

*Source: Vantor Imagery, 2025; Monterey County, 2024.*

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**Figure 4.9-2a**

Marina Municipal Airport – Airport Safety Zones

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Source: Vantor Imagery, 2025; Monterey County, 2024.

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**Figure 4.9-2b**

Monterey Regional Airport – Airport Influence Area

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# 4.10 Hydrology and Water Quality

This section evaluates the potential for impacts related to hydrology and water quality resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts to the hydrological environment and water quality related to water quality standards, groundwater supplies, drainage and stormwater flows, flooding and inundation, and hydrological/water quality planning. Refer to Sections 4.4, Biological Resources, and 4.18, Utilities and Service Systems, for analysis regarding jurisdictional waters/wetlands and potable water supply, respectively.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.10.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address hydrology and water quality.

### 4.10.1.1 Federal

#### Clean Water Act

The Clean Water Act (CWA), formally the Federal Water Pollution Control Act, is the principal law governing pollution control and water quality of the nation's waterways, including lakes, rivers, aquifers, and coastal areas. The CWA's objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 USC Section 1251, et seq.).

CWA Section 402 controls water pollution through the National Pollutant Discharge Elimination System (NPDES) by regulating point sources that discharge pollutants into waters of the United States. The U.S. Environmental Protection Agency is responsible for implementing the CWA and has delegated much of this authority to state and regional agencies. Individual projects that disturb more than one acre are required to obtain NPDES coverage under the California General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), which is described under state regulations below.

Section 401 of the CWA requires any activity that would result in discharge into waters of the U.S. be certified by the Regional Water Quality Control Board (RWQCB). This certification ensures the proposed activity would not violate state or federal water quality standards. Section 404 of the CWA authorizes the U.S. Army Corps of Engineers to regulate the discharge of dredged or fill material to the waters of the U.S. and adjacent wetlands. Discharges to waters of the U.S. must be avoided where possible and minimized and mitigated where avoidance is not possible.

Under CWA Section 303(d), states, territories, and authorized Tribes are required to develop lists of impaired waters, which are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized Tribes (refer to Table 4.10-3, 2024 303(d) List of Impaired Waterbodies Within 1 Mile of Any Project Site). The law requires that these jurisdictions establish priority rankings for listed waters and develop total maximum daily loads for these waters. A total maximum daily load is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

### Federal Emergency Management Agency

Federal Emergency Management Agency (FEMA) formed in 1979 as an independent agency and became part of the U.S. Department of Homeland Security in March 2003. The agency is tasked with responding to, planning for, recovering from, and mitigating against disasters. FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers studies and approved FEMA studies, as well as for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or human-made disasters. Additionally, FEMA provides disaster assistance to states, communities, and individuals.

FEMA distributes Flood Insurance Rate Maps (FIRMs) that identify the locations of special flood hazards areas, including the 100-Year Flood Zone. Executive Order 11988 (Flood Plain Management, issued in 1977) links the need to protect lives and property with the need to restore and preserve natural and beneficial floodplain values. In 2000, FEMA adopted revisions to 44 Code of Federal Regulations, known as the Disaster Mitigation Act (DMA) or DMA 2000. Section 322 (a-d) of the DMA 2000 requires local governments to have a Hazard Mitigation Plan as a condition of receiving federal disaster mitigation funds.

### 4.10.1.2 State

#### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) established the principal California legal and regulatory framework for water quality control. Porter-Cologne Act is embodied in the California Water Code, which authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the federal CWA.

The state is divided into nine regions governed by the RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. Monterey County is within the purview of the Central Coast RWQCB (Region 3). Porter-Cologne Act also provides for the development and periodic review of basin-specific Water Quality Control Plans that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters.

#### State Water Resources Control Board Construction General Permit

Construction activities that disturb more than 1 acre of land are subject to a Construction General Permit. To comply, the applicant for a Construction General Permit must file a complete and accurate Notice of Intent with the SWRCB. Compliance requires conformance with applicable best management practices (BMPs) and implementation of a Stormwater Pollution Prevention Plan. A Stormwater Pollution Prevention Plan's purpose is to develop a strategy for construction projects to comply with stormwater regulations to minimize sedimentation, erosion, and point source and non-point source pollutants entering waterways. BMPs are designed to aid and guide on-site personnel to secure a site's stormwater discharges during rain events through prevention, action, and stabilization methods and techniques.

#### Sustainable Groundwater Management Act

In September 2014, Governor Brown signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires Groundwater Sustainability Plans (GSP) to be developed for medium- and high priority groundwater basins. Because groundwater basins often do not follow jurisdictional boundaries, local agencies may partner to form a groundwater sustainability agency (GSA) which is responsible for implementing its GSP. Each GSP covers a defined plan area encompassing a medium or high priority basin and includes elements such as a sustainability goal, groundwater conditions, a water budget, and a description of projects or steps to achieve and maintain sustainability of the basin.

In Monterey County, there are currently five approved GSPs and two approved alternative plans and 13 active GSAs:

- Langley Area GSP
  - Salinas Valley Basin GSA – Langley Area
- 180/400 Foot Aquifer GSP (under periodic review)
  - Marina Coast Water District GSA – 180/400 Foot Aquifer
  - County of Monterey GSA – small portion of 180/400 Aquifer
  - Salinas Valley Basin GSA – 180/400 Foot Aquifer
- Monterey GSP
  - Marina Coast Water District GSA – Monterey
  - Salinas Valley Basin GSA – Monterey
- East Side Aquifer GSP
  - Salinas Valley Basin GSA – East Side Aquifer
- Forebay Aquifer GSP
  - Arroyo Seco GSA – 1
  - Salinas Valley Basin GSA – Forebay Aquifer
- Upper Valley Aquifer GSP
  - Salinas Valley Basin GSA – Upper Valley Aquifer
- Pajaro Valley Basin Management Plan (approved alternative plan)
  - Pajaro Valley Water Management Agency GSA
- No approved GSP or alternative plan
  - Monterey Peninsula Water Management District GSA
  - City of Marina GSA

The Seaside Sub-basin was adjudicated and is under management by a court-appointed Watermaster. As an adjudicated basin, the Seaside Basin is not required under the Sustainable Groundwater Management Act to prepare and carry out a Groundwater Sustainability Plan. Through the adjudication process, the court established the Seaside Groundwater Basin Watermaster to oversee individual and collective rights to groundwater, and the reasonable use and coordinated management of groundwater in the Seaside Basin.

### Water Quality Control Plan for the Central Coastal Basin

Adopted in June 2019 by the Central Coast RWQCB, the Water Quality Control Plan for the Central Coastal Basin (Basin Plan) shows how the quality of surface water and groundwater in the Central Coast RWQCB Region should be managed to provide the highest water quality reasonably possible.

The Basin Plan lists the various water uses (beneficial uses) of identified waterbodies in the region and describes the water quality which must be maintained to allow those uses (water quality objectives). The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose waste discharges can affect water quality.

### Municipal Separate Storm Sewer System Permits

The RWQCB issues stormwater discharge permits for municipalities in its jurisdiction. In the Central Coast Region, the City of Salinas holds the only Phase I Municipal Separate Storm Sewer System (MS4) permit in the Central Coast Region. The Phase II Small MS4 General Permit Water Quality Order (WQO) 2013-0001-DWQ was adopted on February 5, 2013. Since 2013, five amendments have been adopted. The MS4 permit implements a regional strategy for water quality and related concerns and mandates a watershed-based approach that often encompasses multiple jurisdictions. The overall permit goals include providing a consistent set of requirements for all co-permittees and minimizing duplicative efforts of improving water quality, rather than just completing individual actions. The SWRCB is required to apply the designation criteria at a minimum to all small MS4s located outside urbanized areas serving jurisdictions with a population density of at least 1,000 people per square mile and a population of at least 10,000. The Phase II MS4 permit is currently under revision, with an informal draft released in July 2024.

### Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region

Implemented by the Central Coast RWQCB, the primary objective of the Post-Construction Stormwater Management Requirements (PCRs) is to ensure that design of development projects reduce pollutant discharges to the maximum extent practicable and prevent stormwater discharges from causing or contributing to a violation of receiving water quality standards. These PCRs apply to all development projects subject to approvals and permits by the County that create or replace 2,500 square feet or more of impervious area collectively over the entire project site. The PCRs set performance requirements for site design and runoff reduction, water quality treatment, runoff retention, peak flow management, and other special circumstances.

### Integrated Regional Water Management Plans

Integrated Regional Water Management (IRWM) is a collaborative effort to identify and implement water management solutions on a regional scale that increase regional self-reliance, reduce conflict and manage water to concurrently achieve social, environmental, and economic objectives. IRWMs differ from traditional approaches to water resource management by integrating all facets of water supply, water quality, wastewater, recycled water, floodwater, and stormwater management. Three IRWM Plans encompass Monterey County: Greater Monterey County, Monterey Peninsula, and Pajaro River Watershed, as discussed in detail in Section 4.10.2.1.

### Protecting our Water and Environmental Resources v. County of Stanislaus (2020)

This case involves the distinction between discretionary and ministerial projects. Stanislaus County issues well construction permits under an ordinance that incorporates state well construction standards and categorically classifies a subset of those projects as ministerial. The plaintiffs challenge that classification practice, alleging the permit issuances are actually discretionary projects requiring California Environmental Quality Act (CEQA) review. The Court found that under the ordinance authorizing the issuance of these permits, some of County's decisions may be discretionary. Accordingly, classifying all issuances as ministerial violates CEQA. Refer to discussion of water well permits according to Chapter 15.08, Water Wells, of the Monterey County Code (County Code) in Section 4.10.1.3.

#### 4.10.1.3 Local

### 2010 General Plan (Inland)

Adopted in 2010, the Monterey County General Plan (2010 General Plan) includes broad goals and policies aimed at protecting the UMC's water quality, water supply, and protecting against flood hazards. Relevant goals and policies from the General Plan Conservation and Open Space Element, Public Services Element, and Safety Element are included below.

#### *Conservation and Open Space Element*

The 2010 General Plan Conservation and Open Space Element includes an overarching goal to protect and conserve the quality of coastal, marine, and river environments (Goal OS-4). To achieve this goal, the Element includes policies to comply with state and federal standards for direct and indirect discharges into waters and upstream protection and maintenance of all waters that drain into the State designated Areas of Special biological Significance (Policies OS-4.2 and OS-4.3). Policies also guide proactive protection of water quality of riparian and jurisdictional areas through requirements for state and federal permitting and mitigation prior to disturbance, and adoption of a Stream Setback Ordinance (Policies OS-5.18 and OS-5.22). Additionally, Policy OS-3.5 includes regulation of activity on slopes to reduce impacts to water quality.

#### *Public Services Element*

The Public Services Element addresses critical infrastructure and service issues, including water supply and water quality (Goals PS-1, PS-2, PS-3, PS-4 and their associated policies). Specifically, Policy PS-2.8 requires all projects minimize runoff and to recharge groundwater where appropriate through implementation of regulatory standards for impervious surfaces, retention/detention structures, protecting and planting vegetation, bioswales, and other measures to increase runoff retention, protect water quality, and enhance groundwater recharge. Discretionary projects, especially those in important groundwater recharge areas, may be subject to additional groundwater recharge protection measures (Policy PS-2.9). Policy PS-3.1 prohibits approval of

discretionary development projects without specific findings and evidence that there is a long-term, sustainable water supply, both in quality and quantity to serve the proposed development. Policy PS-3.1 includes certain exceptions to this requirement, including a rebuttable presumption of a sustainable water for development in Zone 2C of the Salinas Valley Groundwater Basin be exempt from providing proof of a long-term sustainable water supply pending the results of a study of regarding Zone 2C groundwater levels and seawater intrusion. In August 2024, the Board of Supervisors received the Salinas Valley Groundwater Basin Investigation Report (Investigative Report).

The 2010 General Plan EIR projected that agricultural water demand would decrease by 2030, and urban demand would increase, with a net projected decrease in water demand. However, the Investigative Report found that as of 2020, total water demand has increased, and more groundwater is being pumped than assumed in the 2010 General Plan EIR. As such, under Policy PS-3.1, development in Zone 2C now requires providing proof of a long-term sustainable water supply as in no longer exempt from these provisions outlined in PS-3.1. The County is in the process of determining next steps in partnership with the Salinas Groundwater Sustainability Agency on how to implement the recommendations of the Report, including possible amendments to PS-3.1 to reflect completion of the report and requirements for development in Zone 2C.

Policy PS-3.2 details the specific criteria for proof of a long-term sustainable water supply.

#### *Safety Element*

The General Plan Safety Element addresses state mandated areas and establishes policies and programs to protect the public from risks associated with flood hazards. Goal S-2 and Policies S-2.1 through 2.12 address flood hazards with the intent to reduce the amount of new development in floodplains and, for any development that does occur, minimize the risk from flooding and erosion. For example, Policy S-2.3 requires all new development, including filling, grading, and construction within designated 100-year floodplain areas shall conform to the guidelines of FEMA and the National Flood Insurance Program and ordinances established by the County Board of Supervisors. Additionally, Policy S-2.6 states that drainage and flood control improvements needed to mitigate flood hazard impacts associated with potential development in the 100-year floodplain shall be determined prior to approval of new development and shall be constructed concurrently with the development.

Goal S-3 and Policies S-3.1 through S-3.9 address effective storm drainage and flood control (including dam inundation) to protect life, property, and the environment. Policy S-3.1 requires that post-development, off-site peak flow drainage from the area being developed shall not be greater than pre-development peak flow drainage. On-site improvements or other methods for storm water detention shall be required to maintain post-development, off-site, peak flows at no greater than pre-development levels, where appropriate, as determined by the Monterey County Water Resources Agency. Policy S-3.2 requires BMPs to protect groundwater and surface water quality shall be incorporated into all

development. Relating to water quality, Policy S-3.9 requires all future development in urban and suburban areas to implement BMPs as approved in the Monterey Regional Storm Water Management Program which are designed to incorporate Low Impact Development techniques. BMPs may include, but are not limited to, grassy swales, rain gardens, bioretention cells, and tree box filters. BMPs should preserve as much native vegetation as feasible possible on the project site.

## Area and Master Plans

In addition to the above General Plan goals and policies, the following Area and Master Plans have supplemental policies related to hydrology and water quality:

### *Toro Area Plan*

Policy T-1.7 limits residential development in certain areas of the Toro area plan due to infrastructure limitations including groundwater. T-4.1 of the Toro Area Plan prohibits land uses and practices that may contribute to significant increases of siltation, erosion, and flooding.

### *Central Salinas Valley Area Plan*

Policy CSV-5.1 of the Central Salinas Valley Area Plan states that development shall be designed to maintain groundwater recharge capabilities on the property. To protect and maintain areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity, the main channels of the Arroyo Seco River and the Salinas River shall not be encroached on by development.

### *Greater Monterey Peninsula Area Plan*

Policy GMP-3.14 encourages development projects to be served by water from public utilities or mutual water companies. If this is not possible, the County shall consider the cumulative effects of the development's water use on wildlife, fish, and plant communities, and the supply available to existing users.

### *North County Area Plan (Inland)*

Policy NC-1.5 requires comprehensive review of infrastructure constraints, including water supply, for residential development. Policy NC-3.8 requires discretionary permits for all new wells in fractured rock or hard rock areas. Policy NC-3.9 protects highly erodible steep slopes from development. Policies NC-5.1 through NC-5.4 address groundwater recharge, prioritization of water supply projects, watershed basin conservation and protection programs, and water quality.

### *South County Area Plan*

Policies SC-5.1, SC-5.2, and SC-5.3 of the South County Area Plan address groundwater recharge, watershed basin conservation and protection programs, and minimization of encroachment into the channels and floodways of the Nacimiento, San Antonio, and Salinas Rivers.

#### *Greater Salinas Area Plan*

Policy GS-1.13 requires comprehensive review of infrastructure constraints, including water supply, for residential development.

#### *Carmel Valley Master Plan*

Policies CV-5.4, CV-5.5, and CV-5.6 address limitations of development to protect groundwater quantity and to avoid water quality impacts associated with septic systems and hazardous materials storage systems, in the Carmel Valley area.

#### *Fort Ord Master Plan*

Hydrology and Water Quality Policies (and applicable programs):

- A-1 and A-2 address minimization of runoff and maximization of groundwater recharge.
- B-1 and B-2 address long-term water supply and groundwater management, including verification of long-term water supply as a condition of approval for development plans.
- C-1 through C-6 address water quality and stormwater pollution control and prevention, mitigation of seawater intrusion, minimization of siltation of waterways, and compliance with waste discharge requirements.

### Community Plans

#### *Castroville Community Plan*

Goal 5 and Policy 5.3 of the Castroville Community Plan address protection of important natural and human-made resources through water conservation and water quality improvement projects. Goal 10 and Policies 10.1, 10.2, 10.5, and 10.8 pertain to adequate public services and infrastructure to meet the needs of existing and new development, including flood control facilities.

### Monterey County Local Coastal Program – Land Use Plans

#### *North County Land Use Plan*

Key Policy 2.5.1 requires that the water quality of the North County groundwater aquifers shall be protected, and new development shall be controlled to a level that can be served by identifiable, available, long-term water supplies. The estuaries and wetlands of North County shall be protected from excessive sedimentation resulting from land use and development practices in the watershed areas. General Policies 2.5.2(1-6) generally address water quality and water supply. Policies 2.5.3.A(2), 2.5.3.A(3), 2.5.3.A(4) – Water Supply, support the County's long-term policy to limit groundwater use to the safe-yield level, which is defined as 50 percent of the buildout allowed under the Land Use Plan. Policies 2.5.3.B(1-6) address multiple facets of water quality including dumping, agricultural runoff monitoring, cumulative impacts to groundwater and surface water reservoirs, maintenance of septic systems, and study of seawater

intrusion. Section 2.5.3.C outlines specific Erosion and Sedimentation Control measures and permit requirements. Section 2.5.4 outlines Recommended Actions to be taken by the County to meet these water quality and supply goals and policies.

#### *Carmel Area Land Use Plan*

Key Policy 3.2.2 and Water Supply Policies 3.2.3 states that the County should reserve from its allotted water supply a sufficient quantity to accommodate coastal priority land uses proposed in the plan. Key Policy 3.3.2 and Wastewater Treatment Policies 3.3.3 address wastewater disposal systems and the establishment of water quality management and monitoring programs intended to protect and maintain a high level of water quality in the Area of Special Biological Significance and in the Carmel area's coastal streams Policy 2.4.4.B.8 requires all new or expanding wastewater discharges into the coastal waters of Monterey County to require a permit from the Health Department.

### Monterey County Code

#### *Title 15 – Public Services*

**Chapter 15.04, Domestic Water Systems** provides the means to regulate the water quality of domestic water systems. This chapter regulates construction, installation, maintenance and operation of domestic water systems which have at least two, but not more than 14 service connections; supplements minimum State laws and standards for construction, installation, maintenance, and operation of state small water systems; and regulates the quality and quantity of water supplied to and by such water systems, thereby promoting the public health, safety, and welfare.

**Chapter 15.08, Water Wells** provides for the construction, repair, and reconstruction of all wells, including cathodic protection wells, test wells, observation wells, and monitoring wells, to the end that the groundwater of this County will not be polluted or contaminated and that water obtained from such wells will be suitable for the purpose for which used and will not jeopardize the health, safety or welfare of the people of this County. It is also the purpose of this chapter to provide for the destruction of abandoned wells, monitoring wells, observation wells, test wells, and cathodic protection wells found to be public nuisances, or when otherwise appropriate, to the end that all such wells will not cause pollution or contamination of groundwater.

A new well is required to obtain a permit that is subject to discretionary review by the County Health Officer. When reviewing the application for a new well permit, the Health Office may condition the permit in any manner necessary to meet the conditions of the chapter and may deny the permit based on their judgment if it defeats the purposes of the chapter.

**Section 15.08.140, Special groundwater protection** establishes various groundwater protection regulations that address specific circumstances in the County, including the prevention of mixing

of aquifers in areas of groundwater quality problems or contamination and requirements for wells in specific zones of historic contamination.

**Chapter 15.20, Sewage Disposal** allows the continued use of on-site wastewater treatment systems while protecting water quality and public health through the proper design, placement, installation, maintenance, and evaluation of individual on-site wastewater treatment systems in Monterey County.

**Chapter 15.21, Prohibited Discharge of Sewage into Streams** prohibits discharge of any treated or untreated sewage into any river or stream that flows in, into or through the County of Monterey, regardless of whether such discharge occurs in or outside the County of Monterey, if such stream or river recharges groundwater aquifers that are used as a source of domestic or potable water for residents of Monterey County.

**Chapter 15.22, Discharge of Contaminants into Waters of the County** prohibits any new pipes or conduits to carry discharges into the waters of the County which contain any contaminant or cause any contamination or pollution; discharge into the waters of the County any contaminant or cause any contamination or pollution; placement of any pipes or conduits that are to carry contaminants into the waters of the County.

**Chapter 15.23, Sewage Treatment and Reclamation Facilities** contains regulations that prohibit the discharge of sewage in a manner which may cause contamination of groundwater supplies.

### *Erosion Control Ordinance*

Chapter 16.12 – Erosion Control, of the County Code, sets forth required provisions for project planning, preparation of erosion control plans, runoff control, land clearing, and winter operations; and establishes procedures for administering those provisions. The preparation of an erosion control plan is required prior to the issuance of any building, grading, or land clearing permit. The erosion control plan must propose methods for the control of runoff, erosion, and sediment movement during both construction and operation requiring such permits. No grading or clearing may take place on the site prior to approval of an erosion control plan for that activity.

### *Monterey County Stormwater Quality Management and Discharge Control Ordinance*

**Chapter 16.14 – Urban Stormwater Quality Management and Discharge Control**, of the County Code, contains the Monterey County Stormwater Ordinance. Consistent with the CWA and the Porter-Cologne Act, the ordinance contains construction and operational requirements to enhance watercourses within the unincorporated urbanized areas by, among other things, controlling the entry of urban pollutants into stormwater runoff that may enter the County storm drain system.

### *Regulations for Floodplains in Monterey County*

**Chapter 16.16 – Regulations for Floodplains in Monterey County**, of the County Code, seeks to minimize public and private losses due to flood conditions in hazard areas through regulating uses, requiring protections from floods, control alterations to floodplains, control grading, and regulate floodplain diversions.

### *Title 19 – Subdivisions (Inland and Coastal)*

Sections 19.10.070 and 19.10.075 address domestic water supply and sewage disposal requirements for proposed subdivisions.

### *Title 20 – Coastal Implementation Plans and Zoning*

North County Coastal Implementation Plan, Section 20.144.070, Water Resource Development Standards provides development standards which will protect the water quality of the North County surface water resources and groundwater aquifers, control new development to a level that can be served by identifiable, available, and long-term water supplies, and protect North County streams, estuaries, and wetlands form excessive sedimentation resulting from land use and development practices in the watershed areas.

North County Coastal Implementation Plan, Section 20.144.100, Hazardous Development Standards – Section B. Flood Hazards establishes development standards within the 100-year floodway.

Carmel Area Coastal Implementation Plan, Section 20.146.050, Water and Marine Resources Development Standards, provides development standards to protect the water quality of the Carmel area's coastal streams, Point Lobos and Carmel Bay areas of Special Biological Significance. The effects of all new development proposals or intensification of land use activities or water uses on the natural character and values of the Carmel area coasts and streams will be specifically considered in all land use decisions. Subjects to be addressed in such evaluations include protection of water quantity and quality.

### *Title 21 – Zoning (Inland)*

Section 21.64.130, Regulations for land use in the Carmel Valley Floodplain, protects the Carmel River and its corridor including visual aspects, value as wildlife habitat and stabilize the river channel; preserve the rural character of Carmel Valley; and promote the public health and safety by lessening local flood potential and flood related hazards.

## Groundwater Monitoring Program

The Monterey County Water Resources Agency and the Salinas Valley Basin GSA are partnering to improve the collection and storage of regional groundwater data through the Groundwater Monitoring Program (GMP). The GMP includes well registration, groundwater elevation

monitoring, groundwater quality monitoring (seawater intrusion), and groundwater extraction monitoring. The partnership establishes one cohesive program to comply with the regulatory-driven monitoring requirements under the Sustainable Groundwater Management Act, while ensuring efficiency and transparency. The key goal is to improve the availability of accurate and timely groundwater information, which aids in effectively managing water resources. The Salinas Valley Basin GSA is charged with achieving sustainability in the Salinas Valley Groundwater Basin, which extends from the southern boundary of Monterey County to northwestern Monterey County.

Through the GMP, the expansion of well registration and groundwater extraction monitoring requires all wells in the Salinas Valley Groundwater Basin to be registered with the Monterey County Water Resources Agency.

### Monterey County Multi-Jurisdiction Hazard Mitigation Plan

The 2022 Monterey County Multi-Jurisdictional Hazard Mitigation Plan was approved by FEMA on September 14, 2022. The plan includes UMC, all 12 incorporated municipalities (Carmel-by-the-Sea, Del Rey Oaks, Gonzales, Greenfield, King, Marina, Monterey, Pacific Grove, Salinas, Sand City, Seaside, and Soledad), and five special districts (i.e., Monterey County Water Resources Agency, the Carmel Area Wastewater District, Monterey One Water, the Monterey Regional Waste Management District, and the Moss Landing Harbor District). Implementation of the plan consists of mitigation activities that can be developed, planned, and implemented before or after a disaster occurs. Hazard mitigation activities involve long- and short-term actions and include planning efforts, policy changes, programs, studies, improvement projects, and other steps to reduce the impacts of hazards. Hazards addressed by the plan include natural (such as severe weather events and earthquake) and human driven (cyber-attack and terrorism). Of the various potential hazards, the plan ranks hydrological issues as: High – Drought & Water Shortage; Substantial – Localized Stormwater Flooding; Moderate – Riverine Flooding, Flash Flooding, Coastal Flooding; Possible – Dam Failure, Tsunami, Levee Failure.

## 4.10.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to hydrology and water quality.

### 4.10.2.1 Surface Water

Seven major watersheds span Monterey County under the responsibility of three different Regional Water Management Groups (RWMGs), based on watershed and jurisdictional boundaries. The seven major watersheds include Bolsa Nueva, Carmel River, Estero Bay, Estrella River, Pajaro River, Salinas River, and Santa Lucia. Each major watershed is described below and in Table 4.10-1, Summary of Watersheds in Monterey County, based on IRWM Plan region. Major watersheds are also shown on Figure 4.10-1, Watersheds and Integrated Regional Water Management Regions in Monterey County.

**Table 4.10-1. Summary of Watersheds in Monterey County**

| Major Watershed | Major Surface Waters | UMC Planning Area in HEU6 | Opportunity Site(s) |
|---|---|---|---|
| **Greater Monterey County IRWM Region** | | | |
| Bolsa Nueva | Elkhorn Slough, Bennett Slough, McClusky Slough | North County Inland, North County Coastal | 48 |
| Estero Bay | Wagner Creek | None | None |
| Estrella River | Cholame Creek, Little Cholame Creek, Cottonwood Creek | None | None |
| Salinas River | Salinas River, Arroyo Seco River, San Antonio River and Reservoir, Nacimiento River and Reservoir[1], Pancho Rico Creek, Santa Rita Creek, Estrella Creek, Chalone Creek, San Lorenzo Creek, El Toro Creek, Prunedale Creek, Gabilan Creek, Alisal Creek, Natividad Creek, Santa Rite Creek, Tembladero Slough | North County (Coastal), North County (Inland), Greater Salinas, Toro, Fort Ord, Greater Monterey Peninsula, Central Salinas Valley | 1 through 15, 24 through 34, 39, 41, 42, 44, 46, 47, 52, 53 |
| Santa Lucia | Big Sur River, Little Sur River, Big Creek | Carmel Area | None |
| **Monterey Peninsula IRWM Region** | | | |
| Carmel River | Carmel River, Carmel River Estuary, Black Rock Creek, Los Padres Reservoir | Carmel Valley, Carmel Area | 16 through 23, 35 through 38, 40, 43, 45, 54, 55, 56 |
| **Pajaro River Watershed IRWM Region** | | | |
| Pajaro River | Pajaro River, Pajaro River Estuary | North County (Inland), North County (Coastal) | 49 through 51, 64 |

**Sources:** SWRCB 2024a; Pajaro River Watershed RWMG 2019; Greater Monterey County RWMG 2018; Monterey Peninsula RWMG 2019.

**Notes:** HEU6 = Housing Element Update for the Sixth Cycle; IRWM = Integrated Regional Water Management; UMC = Unincorporated Monterey County

[1] Nacimiento Reservoir is outside the Greater Monterey County IRWM Plan region and County but is included due to its importance in the Salinas River system.

## Greater Monterey County Integrated Regional Water Management Region

The Greater Monterey County IRWM region includes five major watersheds spanning the entirety of Monterey County (except the Monterey Peninsula and Pajaro River Watershed IRWM regions) and a portion of San Benito County, following the boundary of the Salinas River watershed. The largest watershed in the region, the Salinas River watershed, encompasses approximately 3,950 square miles and spans the Counties of Monterey, San Benito, and San Luis Obispo (located outside the Greater Monterey County IRWM region). Other major watersheds include: the Santa Lucia watershed located along the Big Sur coast; the northern most portion of the Estero Bay watershed, located along the coast south of Santa Lucia; the northern portion of the Estrella River watershed in the southern inland area of Monterey County; and the smaller Bolsa Nueva watershed, located at the northern end of Monterey County. The majority of both the Estero Bay and Estrella River watersheds are in San Luis Obispo County, outside the Greater Monterey County IRWM region. (Greater Monterey County RWMG 2018).

Important surface waters of the Greater Monterey County IRWM region include (Greater Monterey County RWMG 2018):

- The Salinas River – the third longest river in California at approximately 120 miles in length and the largest water system in Monterey County, draining over 4,000 square miles of land. Major tributaries include Pancho Rico Creek, Santa Rita Creek, Estrella Creek, Chalone Creek, San Lorenzo Creek, El Toro Creek, Prunedale Creek, Arroyo Seco River, Nacimiento River and San Antonio River.
- The San Antonio and Nacimiento Rivers and Reservoirs – Although located outside the Greater Monterey County IRWM region, the Nacimiento Reservoir provides approximately 62 percent of the total water in the Salinas River system, whereas the San Antonion Reservoir provides approximately 13 percent.
- Waterways originating in the Santa Lucia Range along the Big Sur coast – These include Little Sur River, Big Sur River, and Big Creek, and their smaller tributaries including Pfeiffer-Redwood, Juan Higuera, and Pheneger Creeks.
- The Elkhorn Slough and Moro Cojo Slough – These areas located in the northern coastal area of the Greater Monterey County IRWM region include important estuarine habitat, including large areas of marsh, mudflats, and open water. The Elkhorn Slough is an important breeding area for marine species and commercial harvesting.
- The Monterey Bay and the coastal waters of the Monterey Bay National Marine Sanctuary (MBNMS) – The MBNMS is a federally protected marine area located along approximately 276 miles of shoreline and across 6,094 square miles of ocean. Approximately 65 miles of the MBNMS is located in the Greater Monterey County IRWM region.

### Monterey Peninsula Integrated Regional Water Management Region

The Monterey Peninsula IRWM region encompasses approximately 350 square miles, including the six Monterey Peninsula Cities of Carmel-by the Sea, Del Rey Oaks, Pacific Grove, Monterey, Sand City, Seaside, and extends into portions of the UMC and inland areas. Approximately 255 square miles of the region is in the Carmel River watershed. The remaining area of the region is composed of 12 other stream basins including Wildcat Canyon, Gibson Creek, San Jose Creek, Pescadero Creek, Stillwater Creek, Fan Shell Creek, Seal Rock Creek, Sawmill Gulch Creek, Josselyn Canyon Creek, Aguajito Canyon, Iris Canyon, and Arroyo del Rey. Important surface waters include the MBNMS (described above) and:

- The Carmel River – Originating from the Santa Lucia Range, the Carmel River travels approximately 36 miles, merging with seven major tributaries, and discharges into Carmel Bay south of the City of Carmel-by-the-Sea.
- The Los Padres Reservoir – The Los Padres dam and reservoir is owned by California American Water (Cal-Am). The Monterey Peninsula Water Management District, in

partnership with Cal-Am and other agencies, is currently studying several alternatives related to the dam, including dam removal, installation of fish passages, sediment removal, and reservoir expansion. (Monterey Peninsula RWMG 2019). Cal-Am is the largest private water utility provider in this area. Cal-Am is currently under orders from the SWRCB to reduce its pumping of the Carmel River and remain within their legal water rights. Discussion on this and the cease-and-desist order (CDO) regarding Cal-Am's diversion of water from the Carmel River is found in Section 4.16 of the PEIR.

### Pajaro River Watershed Integrated Regional Water Management Region

The Pajaro River Watershed IRWM region encompasses the entirety of the Pajaro River Watershed. The Pajaro River Watershed spans approximately 1,300 square miles, spanning the Counties of Santa Cruz, Santa Clara, San Benito, and Monterey. Relative to the rest of the watershed, only a small portion is in the northernmost end of Monterey County, where the watershed drains directly into Monterey Bay (Pajaro River Watershed RWMG 2019).

### 4.10.2.2 Groundwater

Groundwater is the primary source of Monterey County's water supply. Monterey County principally relies on local groundwater and surface water sources to supply the region's demand, with none imported from outside sources (e.g., the State Water Project) (Greater Monterey County RWMG 2018). Therefore, groundwater is of critical importance to the water supply of Monterey County.

The California Department of Water Resources (DWR), through implementation of the Sustainable Groundwater Management Act, identifies and prioritizes the groundwater basins throughout the state, including Monterey County. These groundwater basins are primarily in the major river valleys in the region, with the largest basins spanning the entire Monterey County from north to south in the Salinas Valley. Table 4.10-2, Summary of Groundwater Basins in Monterey County, provides a summary of the groundwater basins in Monterey County, along with any opportunity sites located within. If a site is not listed in Table 4.10-2, then it is not in a groundwater basin boundary. The Sustainable Groundwater Management Act and related regulations are described in Section 4.10.1.2.

**Table 4.10-2. Summary of Groundwater Basins in Monterey County**

| Groundwater Basin (DWR Designator) | DWR Basin Priority | Planning Areas | Opportunity Sites |
|---|---|---|---|
| Corralitos – Pajaro Valley (3-002.01) | High (Critically Overdraft) | North County Land Use Plan (Coastal), North County Area Plan (Inland) | 48 through 51, 64 (150 units) |
| Salinas Valley – 180/400 Foot Aquifer (3-004.01) | High (Critically Overdraft) | Greater Salinas Area Plan, Fort Ord Master Plan, North County Area Plan (Inland), Central Salinas Valley Area Plan, North County Coastal Land Use Plan | 5, 6, 11 through 15, 25 through 30, 41 (339 units) |
| Salinas Valley – East Side Aquifer (3-004.02) | High | Greater Salinas Area Plan | 1 through 4 (867 units) |

**Table 4.10-2. Summary of Groundwater Basins in Monterey County**

| Groundwater Basin (DWR Designator) | DWR Basin Priority | Planning Areas | Opportunity Sites |
|---|---|---|---|
| Salinas Valley – Forebay Aquifer (3-004.04) | Medium | Central Salinas Valley Area Plan | None |
| Salinas Valley – Upper Valley Aquifer (3-004.05) | Medium | Central Salinas Valley Area Plan | 32 through 34, 42 (51 units) |
| Salinas Valley – Seaside (3-004.08) | Low | Greater Monterey Peninsula Area Plan, Fort Ord Master Plan | 46, 47 (152 units) |
| Salinas Valley – Langley Area (3-004.09) | High | North County Area Plan (Inland) | 8 through 10, 39, 44 (250 units) |
| Salinas Valley – Monterey (3-004.10) | Medium | Fort Ord Master Plan, Carmel Area Land Use Plan, Toro Area Plan, Greater Monterey Peninsula Area Plan | 16, 24, 31, 53 (805 units) |
| Cholame Valley (3-005) | Very Low | South County Area Plan | None |
| Lockwood Valley (3-006) | Very Low | Central Salinas Valley Area Plan | None |
| Carmel Valley (3-007) | Medium | Carmel Valley Master Plan | 17 through 23, 35 through 38, 54, 56 (444 units) |
| Peach Tree Valley (3-032) | Very Low | Central Salinas Valley Area Plan | None |

**Source:** DWR 2020.
**Notes:** DWR = California Department of Water Resources

#### 4.10.2.3 Water Quality

Monterey County is in the jurisdiction of the Central Coast RWQCB. The Central Coast RWQCB geographic area also encompasses the entire Counties of Santa Cruz, San Benito, San Luis Obispo, and Santa Barbara, as well as portions of the Counties of Santa Clara, San Mateo, Kern, and Ventura. The Central Coast RWQCB oversees water quality and waste discharge requirements through implementation of the Basin Plan for the Central Coastal Basin. Water quality is heavily influenced by land uses, including urban runoff, agricultural runoff, erosion, and underground storage tanks. Substantial water quality issues in Monterey County include (Greater Monterey County RWMG 2018):

- Erosion and Sedimentation – Due to the existing sandy soil composition and increased agricultural uses, erosion is an increasing important issue in the northern regions of the Monterey County. However, erosion and sedimentation remain a widespread surface water quality issue throughout Monterey County.
- Nitrate – Nitrate contamination results mainly from the use of nitrogen-based fertilizers that spreads in agricultural irrigation runoff. In particular, the agricultural and urban uses in the Salinas Valley elevate nitrogen levels in the Salinas River and groundwater basins, which ultimately flows to Monterey Bay.
- Seawater Intrusion – Seawater intrusion was first documented in wells in 1932. Intensification of urban and agricultural development has resulted in consistent groundwater basin overdraft, leading to regular seawater intrusion from Monterey Bay

into coastal groundwater basins including the Salinas Valley – 180/400 Foot Aquifer, Salinas Valley – Monterey, and the Corralitos – Pajaro Valley basins.

The SWRCB, in compliance with CWA Section 303(d), has prepared a list of impaired water bodies in the state, which was most recently revised in 2024. The Final 2024 303(d) List includes 428 individual entries in Monterey County. Note that any given impaired waterbody, such as Salinas River or Gabilan Creek, may have multiple entries for different pollutant types or sections of the waterbody. Table 4.10-3, 2024 303(d) List of Impaired Waterbodies Within 1 Mile of Any Project Site, summarizes a portion of the 303(d) list of impaired water bodies in Monterey County within 1 mile of opportunity sites.

**Table 4.10-3. 2024 303(d) List of Impaired Waterbodies Within 1 Mile of Any Project Site**

| Impaired Waterbody | Listed Pollutant(s) |
|---|---|
| Alisal Slough | Diazinon, Malathion, Toxicity, Turbidity, Imidacloprid, Nitrate, Ammonia |
| Carmel River | Toxicity, Benthic Community Effects |
| Carneros Creek | Chlorophyll-a, Chlorpyrifos, Copper, Organophosphate Pesticides, Dissolved Oxygen, pH, Turbidity, Escherichia coli (E. coli), Nitrate, Ammonia, DDE |
| Chualar Creek | Chlorpyrifos, Diazinon, Malathion, Organophosphate Pesticides, Dissolved Oxygen, pH, Toxicity, Turbidity, Imidacloprid, Methomyl, Bifenthrin, Dimethoate, Cyhalothrin, Lambda, Permethrin, Bensulide, Nitrate, Temperature, water, Ammonia, Escherichia coli (E. coli), Fecal Coliform |
| Chualar Creek, South Branch | pH, Toxicity, Turbidity, Nitrate, Temperature, Ammonia |
| Don Dahvee Creek | Copper, Lead, Zinc, Escherichia coli (E. coli) |
| Gabilan Creek | Copper, Dissolved Oxygen, pH, Toxicity, Turbidity, Imidacloprid, Escherichia coli (E. coli), Nitrate, Ammonia, Fecal Coliform, Benthic Community Effects |
| Merrit Ditch | Copper, Diazinon, Malathion, pH, Toxicity, Turbidity, Pyrethroids, Bifenthrin, Permethrin, Clothianidin, Escherichia coli (E. coli), Ammonia, Nitrate, Cypermethrin |
| Natividad Creek | Chlorpyrifos, Copper, Diazinon, Malathion, Organophosphate Pesticides, Dissolved Oxygen, Toxicity, Turbidity, Pyrethroids, Imidacloprid, Bifenthrin, Permethrin, Escherichia coli (E. coli), Temperature, Ammonia, Nitrate, Fecal Coliform, Benthic Community Effects |
| Pacific Ocean at Stillwater Cove Beach | Enterococcus |
| Pajaro River | Sedimentation/Siltation, Boron, Sodium, Chloride, Chlorpyrifos, Manganese, Nickel, Dissolved Oxygen, pH, Selenium, Toxicity, Turbidity, Chromium, Escherichia coli (E. coli), Oxyfluorfen, Benthic Community Effects, Chlordane, Dieldrin, Heptachlor epoxide, PCBs, Imidacloprid, DDD, DDE, DDT, Nitrate, Aluminum |
| Salinas Reclamation Canal | Priority Organics, Permethrin, Chlorpyrifos, Copper, Disulfoton, Lead, Malathion, Organophosphate Pesticides, pH, Turbidity, Imidacloprid, Methomyl, Bifenthrin, Dimethoate, Cyfluthrin, Cyhalothrin, Lambda, Fenpropathrin, Permethrin, Clothianidin, Thiamethoxam, Ammonia, Nitrate, DDD, DDE, Escherichia coli (E. coli), Fecal Coliform, Pyrethroids, Cypermethrin, Deltamethrin, Benthic Community Effects, Toxicity, Aluminum |
| Salinas River (lower, estuary to near Gonzales Rd crossing) | Toxaphene, Enterococcus, Arsenic, Chlordane, Chloride, Dieldrin, Manganese, Nickel, pH, PCBs (Polychlorinated biphenyls), Selenium, Sodium, Total Dissolved Solids, Turbidity, Chromium, Temperature, water, DDT, DDD, Escherichia coli (E. coli), DDE, Toxicity, Fipronil, Imidacloprid, Bifenthrin, Benthic Community Effects, Nitrate, Aluminum |
| Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) | pH, Toxicity, Turbidity, Temperature, water, Benthic Community Effects |

**Table 4.10-3. 2024 303(d) List of Impaired Waterbodies Within 1 Mile of Any Project Site**

| Impaired Waterbody | Listed Pollutant(s) |
|---|---|
| Salsipuedes Creek (Santa Cruz County) | Lead, Manganese, Dissolved Oxygen, pH, Toxicity, Turbidity, Escherichia coli (E. coli), Nitrate, Aluminum |
| San Lorenzo Creek | Boron, Chloride, Sodium, pH, Turbidity, Specific Conductivity |
| Santa Rita Creek | Lead, Malathion, Dissolved Oxygen, Sodium, Turbidity, Pyrethroids, Imidacloprid, Cyhalothrin, Lambda, Clothianidin, Escherichia coli (E. coli), Temperature, water, Ammonia, Nitrate, Fecal Coliform, Toxicity |
| Tembladero Slough | Enterococcus, Chlordane, Chlorophyll-a, Chlorpyrifos, Copper, Diazinon, Dieldrin, Disulfoton, Lead, Malathion, Nickel, Dissolved Oxygen, pH, Selenium, Turbidity, Pyrethroids, Imidacloprid, Methomyl, Bifenthrin, Cypermethrin, Oxyfluorfen, Chromium, Permethrin, Clothianidin, Thiamethoxam, Nitrate, DDD, DDE, Total Coliform, Toxicity, Aluminum |
| Watsonville Creek | Dissolved Oxygen, pH, Turbidity, Escherichia coli (E. coli), Nitrate |

**Source:** SWRCB 2024b.

#### 4.10.2.4 Flood Hazards

Flood hazards can occur from major storm events, inadequate stormwater conveyance infrastructure, dam/levee failure, and tsunami or other seismically induced flooding.

### Stormwater Inundation

Development in the flood-prone valleys such as the Salinas, Carmel, Pajaro, Big and Little Sur River Valleys have increased potential flood hazards, particularly from development within the 100-year floodplain. In Monterey County, the Salinas River and Carmel River Valleys face the greatest risk from dam failure.

FEMA uses FIRM to show flood risk through a series of zones. Although FIRMs include several subcategories of zones, flood hazard is often discussed in terms of the 100-year (1 percent chance, or base flood) and 500-year (0.2 percent chance) flood zones. The 100-year flood hazard zone is defined as the area subject to inundation by the 1 percent annual chance flood. These areas are typically adjacent to or near rivers and creeks. The 500-year flood hazard is the same, but for inundation by the 0.2 percent annual chance flood. Table 4.10-4, Opportunity Sites Within Flood Hazard Zones, summarizes project sites within flood zones. These sites are shown on Figures 4.10-2a through 4.10-2i, FEMA Flood Hazard Zones.

**Table 4.10-4. Opportunity Sites Within Flood Hazard Zones**

| Flood Hazard Zone | Planning Areas | Opportunity Site(s) |
|---|---|---|
| 100-Year Flood Zone (1% annual chance, base flood elevations) | Greater Salinas, North County Inland, Carmel Valley, Toro, North County Coastal, Central Salinas Valley | 3, 11 through 15, 17, 20 through 22, 24, 35, 49 through 51, 54, 56, 64 |
| 500-Year Flood Zone (0.2% annual chance) | North County Inland, Carmel Valley, Central Salinas Valley, Greater Salinas | 13 through 15, 17 through 22, 30, 35, 37, 41, 42, 56 |
| Floodway (channel of a stream plus adjacent floodplain areas to allow for 1% annual chance flood) | Greater Salinas, North County Inland, Carmel Valley, Central Salinas Valley | 3, 11 through 15, 56 |

**Source:** FEMA 2024.

## Tsunami and Seiche Inundation

Unlike flooding from storm events, tsunamis and seiches occur from seismic activity. Tsunamis are large ocean waves typically generated by offshore earthquakes. Seiches are standing waves that can occur in a partially or fully enclosed body of water, such as a lake or bay, during an earthquake. The California Department of Conservation (DOC) maintains tsunami hazard area maps for the state. However, because tsunamis are rare events and lack historical data, these maps are intended for emergency planning purposes only. Tsunami hazards are generally limited to the immediate coastal lands but have the potential to extend inland into low-lying adjacent areas. Figures 4.10-3a through 4.10-3i, Tsunami Hazard Zones, show the opportunity sites in and near the tsunami hazard zone. Seiches could potentially occur in the many bodies of water located throughout Monterey County, such as the Los Padres and San Antonio Reservoirs and other lakes. Hazards from seiches are highly localized and no project sites are immediately adjacent to an enclosed body of water.

## Dam Inundation

Flooding can also occur from inundation due to dam failure. Dam failure refers to the breakdown, collapse, or other such structural failure that results in the uncontrolled release of water. Dam failure could occur because of intense and prolonged rainfall, earthquake, landslides, and structural deterioration. DWR's Division of Safety of Dams (DSOD) oversees the design, construction, and maintenance of dams, including inundation mapping. Dams with inundation mapping that affect lands in Monterey County include Forest Lake, Los Padres, San Antonio, and Nacimiento. Other dams in DSOD's jurisdiction, but do not have inundation mapping include Pacific Grove, Salinas River Diversion, Silacci, Black Rock Creek. DSOD rates the condition of each dam. It also assigns a hazards category to each dam based on downstream hazard potential, which is independent from the dam's condition. Dams with a "Low" downstream hazard classification are not required to prepare inundation map. Downstream hazard classifications are defined by DSOD as follows:

- Low: No probable loss of human life and low economic and environmental losses. Losses are expected to be principally limited to the owner's property.
- Significant: No probable loss of human life but can cause economic loss, environmental damage, impacts to critical facilities, or other significant impacts.
- High: Expected to cause loss of at least one human life.
- Extremely High: Expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more.

The downstream hazard is based solely on potential downstream impacts to life and property should the dam fail when operating with a full reservoir. This hazard is not related to the condition of the dam or its appurtenant structures. Table 4.10-5, Jurisdictional Dams and Potential Opportunity Site Inundation, summarizes the dams in DSOD jurisdiction along with opportunity

sites in mapped inundation areas. These sites are shown on Figures 4.10-4a through 4.10-4i, Jurisdictional Dam Inundation Zones. Opportunity Site 56 is in the Carmel Valley Master Plan Area, Opportunity Sites 11 through 15 are in the North County Inland Area Plan Area, and Opportunity Site 24 is in the Toro Area Plan Area.

**Table 4.10-5. Jurisdictional Dams and Potential Opportunity Site Inundation**

| Dam | DSOD Condition Assessment | Downstream Hazard Classification | Opportunity Sites Within Inundation Area |
|---|---|---|---|
| Forest Lake | Satisfactory | High | None |
| Los Padres | Satisfactory | Extremely High | 56 |
| San Antonio | Fair | Extremely High | 11 through 15, 24 |
| Nacimiento | Satisfactory | Extremely High | 11 through 15, 24 |
| Pacific Grove | Satisfactory | Low | No inundation mapping required |
| Salinas River Diversion | Satisfactory | Low | No inundation mapping required |
| Silacci | Fair | Significant | No inundation mapping currently available |
| Black Rock Creek | Satisfactory | Low | No inundation mapping required |

**Source:** DWR Division of Safety Dams 2022 and 2024.
**Note:** DSOD = DWR's Division of Safety of Dams

## 4.10.3 Method of Analysis

The analysis contained herein addresses potential hydrological and water quality issues from a programmatic-level and countywide approach, recognizing that individual projects facilitated by the HEU6 may undergo project-specific review during project application phase. Where appropriate and possible, individual project sites are discussed.

Given that the thresholds of significance in this section are primarily based on the location (e.g., in a high priority groundwater basin) and environmental conditions of each site rather than the number of housing units proposed (refer to Section 4.10.4, Thresholds of Significance), this section of the PEIR evaluates each of the opportunity site parcels to determine impacts related to hydrology and water quality.

## 4.10.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on hydrology and water quality if it would:

- **Threshold 1:** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- **Threshold 2:** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

- **Threshold 3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - Result in substantial erosion or siltation on- or off-site.
  - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
  - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
  - Impede or redirect flood flows.
- **Threshold 4:** In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- **Threshold 5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## 4.10.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to hydrology and water quality that could result from implementation of the project.

### 4.10.5.1 Threshold 1: Water Quality Standards

**Threshold 1:** Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

### Impact Analysis

#### *Construction*

Construction activities associated with housing development facilitated by the project would include grading, vegetation removal, demolition at non-vacant sites, building construction, utility trenching, and installation of pavement.

Construction activities could increase soil erosion due to earthmoving activities such as excavation, grading, soil compaction and moving, and soil stockpiling, resulting in sediment transport in runoff. Earthmoving in soils, particularly near historical and ongoing agricultural or heavy commercial uses may release existing contaminants such as nutrients, pesticides, commercial cleaning products, metals, and oils. Such sites include those in Pajaro, Castroville, and the Greater Salinas Valley. Construction would also introduce typical pollutants (e.g., fuels, lubricants) and materials (e.g., metals, plastics, debris) that could enter the waterway. These pollutants have the potential to be transported downstream through erosion and overland flow, ultimately entering nearby waterways and contributing to degradation of surface and groundwater water quality.

Individual opportunity sites vary in hydrology, elevation, slope by location, and stormwater runoff would affect each site differently. New developments at vacant or undeveloped sites, particularly those adjacent to creeks or drainages, are especially at risk of creating stormwater runoff and sedimentation that could affect the quality of receiving surface waters or groundwater basins. Most of the opportunity sites are adjacent to or near the Carmel River (Opportunity Sites 17–23, 35–38, 54, 56), the Salinas River and its tributaries (Opportunity Sites 24–29, 31–34, 42, 47), Canyon Del Rey (Opportunity Sites 46, 52), Santa Rita Creek (Opportunity Sites 1–4), Tembladero Slough (Sites 11–15, 30, 41), Pajaro River (Sites 49–51, 64).

Any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions. Compliance with the NPDES Construction General Permit would trigger preparation and compliance with an approved Stormwater Pollution Prevention Plan that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions to minimize any water quality impacts that could result during construction. Similarly, all projects facilitated by the HEU6 would be subject to the Monterey County Stormwater Ordinance (Chapter 16.14 of the County Code) and the Monterey County Erosion Control Ordinance (Chapter 16.12 – Erosion Control). The Monterey County Stormwater Ordinance requires all construction activity for which a building or grading permit has been issued to implement BMPs to control the discharge of pollutants to the maximum extent practicable, comply with the state Construction General Permit, and eliminate non-stormwater discharges that are not in compliance with an applicable NPDES permit. The Monterey County Erosion Control Ordinance requires development and approval of a project-specific erosion control plan prior to the start of any grading or clearing of a project requiring a building, grading, or land clearing permit. Also available to construction contractors is the Construction Best Management Practices Handbook developed by Monterey Stormwater Education Alliance, an organization that develops regional stormwater programing. The handbook provides technical guidance for both temporary and permanent erosion prevention, sediment control, and management of other activities that can cause pollution during construction.

Individual project compliance with the regulations, policies, and use of available resources would minimize the risk of degradation to surface water and groundwater quality from soil erosion and other pollutants resulting from construction activities. Therefore, impacts to water quality from construction activities would be less than significant.

#### *Operation*

Residential development has the potential to affect water quality through the increase in impervious surfaces and introduction of new pollutants where none were before. Development facilitated by the HEU6 would likely use commercially available products typically associated with residential, including cleaning products, oil, gas, pesticides, fertilizers, sediment, and other debris. The increase in impervious surfaces could affect stormwater runoff flows such that these

pollutants are carried into receiving waterways and groundwater basins. As with construction impacts discussed above, sites nearest waterbodies have an increased risk of negatively affecting their water quality. Additionally, long-term changes to land uses on permeable soils above groundwater basins could result in changes to the quality of water infiltrating through the soils.

Depending on location, potential future development facilitated by the HEU6 would comply with applicable water quality protection goals and policies of the 2010 General Plan, including area plans, master plans, and community plans, and the Local Coastal Program – Land Use Plans, including: Conservation and Open Space Policies OS-4.2, OS-4.3, and OS-3.5; Public Services Element Policy PS-2.8; Safety Element Policy S-3.2 and S-3.9; Toro Area Plan Policy T-4.1; North County Area Plan (Inland) Policies NC-3.8, NC-3.9, and NC-5.2 through NC-5.4; Carmel Valley Mast Plan Policies CV-5.5 and CV-5.6; Fort Ord Master Plan Policies C-1 through C-6; Key Policy 2.5.2 of the North County Land Use Plan; and Key Policy 3.3.2 of the Carmel Area Lan Use Plan. Refer to Appendix B for a non-exhaustive list of plans and policies that need to be modified as part of the project.

Potential future development facilitated by the HEU6 would also be subject to the Phase II MS4 permit, the Monterey County Stormwater Ordinance, the Monterey County Erosion Control Ordinance, and the PCRs, which collectively set requirements for site design and water quality control. These water quality requirements are implemented during the permit and plan review phase of any given residential project requiring a building permit. Future projects subject to the PCRs would be required to develop a project-specific Stormwater Control Plan that demonstrates how the project meets the water quality performance requirements. Typical compliance entails site design to maintain stormwater runoff flows, permanent BMPs to treat runoff prior to discharge from the site, and retention of flows to manage peak runoff. Future projects would be subject to other applicable codified development standards implemented to protect water quality, including County Code, Chapter 15.08 – Water Wells, Section 15.08.140 – Special groundwater protection, Chapter 15.20 – Sewage Disposal, Chapter 15.21, Prohibited Discharge of Sewage into Streams, Chapter 15.22 – Discharge of Contaminants into Waters of the County, Chapter 15.23 – Sewage Treatment and Reclamation Facilities, Section 20.144.070 – Water Resource Development Standards, and Section 20.146.050 – Water and Marine Resources Development Standards. Compliance with the NPDES and MS4 permits, Stormwater Ordinance, Erosion Control, applicable development standards in the County Code, and PCRs for future development facilitated by the HEU6 would minimize the risk of degradation to surface water and groundwater quality from soil erosion and other pollutants resulting from long-term operational activities. Therefore, impacts to water quality from operation would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.10.5.2 Threshold 2: Groundwater Recharge and Supplies

**Threshold 2:** Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

### Impact Analysis

As described in Section 4.10.2.2, groundwater is of critical importance to Monterey County as it is the primary source of water supply to meet potable water demand. Development facilitated by the HEU6 has the potential to affect groundwater supplies from both an increase in demand and interference with infiltration and groundwater recharge. Increased demand would occur from new water users. On the recharge side, development under the project would increase impervious surfaces that could reduce stormwater infiltration into groundwater basins. However, due to the expansive nature of recharge aquifers and the relatively small scale of potential housing sites, future development on individual sites facilitated by the HEU6 is not expected to substantially interfere with groundwater recharge and supply. The discussion contained in this section focuses on the physical interference of groundwater recharge and associated supply. Refer to Section 4.18 for analysis regarding water demand and supply with respect to groundwater.

#### *Recharge*

Groundwater recharge occurs where aquifers intersect with the permeable ground surface and from seepage losses of major streams, rainfall percolation, and subsurface inflow. Development and land use intensification introduces new hardscapes and impervious surfaces that can affect recharge through an increase or redirection of runoff flow that prevents infiltration. As shown in Table 4.10-2, opportunity sites overlie recharge areas in the following basins: Corralitos – Pajaro Valley (Opportunity Sites 48 through 51, 64), Carmel Valley (Opportunity Sites 17 through 23, 35 through 38, 54, 56), and various Salinas Valley aquifers (remaining opportunity sites). The majority of opportunity sites are distributed in six Salinas Valley aquifers. DWR assigns priority to each basin in terms of groundwater management. The Corralitos – Pajaro Valley (Opportunity Sites 48 through 51, 64) and Salinas Valley – 180/400 Foot Aquifer (Opportunity Sites 5 through 6, 11 through 15, 25 through 30, 41) are identified as critically over drafted, and the Salinas Valley – East Side Aquifer (Opportunity Sites 1 through 4) and Salinas Valley – Langley Aquifer (Opportunity Sites 8 through

10, 39, 44) are identified as high priority basins. Sites 16 through 24, 31 through 38, 42, 53, 54, and 56 are located in groundwater basins designated as very low, low, or medium priority.

Note that some of the opportunity sites are not vacant, with some amount of the land already covered with impervious surfaces like asphalt, structures, and concrete. The vacancy status of the opportunity sites is shown in PEIR Chapter 2, Environmental Setting, Table 2-1, Existing Zoning and Uses for Opportunity Sites. Therefore, redevelopment of these sites would result in minor changes in groundwater recharge and, depending on site-specific circumstances, could result in an increase in groundwater infiltration resulting from new landscaping and compliance with more stringent site design regulations. Other non-vacant sites include existing agricultural resources. These sites, when redeveloped, would likely result in an increase in impervious surfaces compared to the existing condition.

Future project compliance with the Phase II MS4 permit, the Monterey County Stormwater Ordinance, the PCRs, and other such applicable laws would result in site design incorporation of runoff retention and infiltration basins. This would control post-development peak stormwater runoff flows and encourage groundwater recharge. Existing regulations are consistent with and implement 2010 General Plan Policy PS-2.8, which requires all projects be designed to maintain or increase the site's pre-development absorption of rainfall (minimize runoff), and to recharge groundwater where appropriate, and Policy PS-2.9, which direct the County to use the discretionary permit process to manage new development of impervious surfaces to maintain or increase a site's pre-development absorption of rainfall. Development project design can provide for the same or an increase in groundwater recharge through thoughtful design of water detention basins, stormwater retention, protecting and planting vegetation, use of permeable paving materials, bioswales, maximizing open space and landscaping.

### *Supply*

As discussed previously, some of the opportunity sites are not vacant with some amount of existing groundwater use. Other non-vacant sites include existing agricultural resources. These sites, when redeveloped, would likely rely less on direct groundwater from on-site wells and could potentially connect to public infrastructure. Future development on individual sites facilitated by the HEU6 is not expected to substantially interfere with groundwater supply due to the expansive nature of recharge aquifers and the relatively small scale of potential housing sites. For example, the Salinas Valley – 180/400 Foot Aquifer encompasses approximately 89,700 acres, while the rezoned acreage under the HEU6 in this critically over-drafted basin is approximately 30.75 acres. However, full buildout of the HEU6 would result in an increase in development over groundwater basins throughout the region, including those basins given the High and High (Critically Overdraft) priorities by DWR, and the adjudicated Seaside Basin. These basins and opportunity sites (with rezoned acreage) include:

- Corralitos – Pajaro Valley, High (Critically Overdraft) (approximately 75,055 acres): Sites 48 through 51, 64 (totals 25.51 acres)
- Salinas Valley – 180/400 Foot Aquifer, High (Critically Overdraft) (approximately 89,700 acres): Sites 5, 6, 11 through 15, 25 through 30, 41 (totals 30.75 acres)
- Salinas Valley – East Side Aquifer, High (approximately 57,474 acres): Sites 1 through 4 (totals 126.56 acres)
- Salinas Valley – Langley Area, High (approximately 15,400 acres): Sites 8 through 10, 39, 44 (23.46 acres)
- Adjudicated Seaside Basin (approximately 14,400 acres): Sites 46, 47 (19 acres)

Despite the relative area of potential housing sites in the larger basin, the project would still result in new water users within over-drafted groundwater basins. Continued over-drafting of groundwater can lead to wells running dry, seawater intrusion, and land subsidence. Therefore, the project would contribute to ongoing groundwater supply issues.

Policy PS-3.1 prohibits approval of discretionary development projects without specific findings and evidence that there is a long-term, sustainable water supply, both in quality and quantity to serve the proposed development. Policy PS-3.1 includes certain exceptions to this requirement, including a rebuttable presumption of a sustainable water for development in Zone 2C of the Salinas Valley Groundwater Basin be exempt from providing proof of a long-term sustainable water supply pending the results of a study of regarding Zone 2C groundwater levels and seawater intrusion. In August 2024, the Board of Supervisors received the Salinas Valley Groundwater Basin Investigation Report (Investigative Report).

The 2010 General Plan EIR projected that agricultural water demand would decrease by 2030, and urban demand would increase, with a net projected decrease in water demand. However, the Investigative Report found that as of 2020, total water demand has increased, and more groundwater is being pumped than assumed in the 2010 General Plan EIR. As such, under Policy PS-3.1, development in Zone 2C now requires providing proof of a long-term sustainable water supply as in no longer exempt from these provisions outlined in PS-3.1. The County is in the process of determining next steps in partnership with the Salinas Groundwater Sustainability Agency on how to implement the recommendations of the Report, including possible amendments to PS-3.1 to reflect completion of the report and requirements for development in Zone 2C.

Policy PS-3.2 details the specific criteria for proof of a long-term sustainable water supply.

Qualifying projects under the HEU6 would be streamlined under an Objective Process and may not be subject to future CEQA. As such, they would not be subject to the discretionary review process requiring evidence to support findings that there is proof of a long-term sustainable water

supply. Should any project require a new well, approval and construction of the well would be subject discretionary review and CEQA[1] per County Code, Chapter 15.08, permit requirements.

Applicable County Code requirements, in combination with the County's compliance with state and local regulations governing water quality, would minimize the project's potential to interfere or inhibit groundwater recharge. Impacts to very low, low, and medium priority groundwater basins would be less than significant. However, because the increased units in UMC would rely on groundwater supplies and given the critical importance of groundwater recharge and sustainable management, along with new development in critically over-drafted and/or high priority groundwater basins, impacts to groundwater recharge and associated supply would be potentially significant. Impacts outside critically over-drafted and/or high priority groundwater basins would be less than significant.

### Significance of Impact

Potentially significant when located in critically over-drafted and/or high priority groundwater basins.

### Mitigation Measures

Preparation and submittal of a groundwater recharge/hydrology analysis will be required for all projects processing under the HEU6 that are in critically over drafted, high priority groundwater basins through Mitigation Measure (MM-) HYD-OBJ-1 and MM-HYD-CONS-2 below.

**MM HYD-OBJ-1:** Applicants for by-right housing on opportunity sites located within Sustainable Groundwater Management Act-designated high priority (critically over drafted) groundwater basins, high priority groundwater basins, or the adjudicated Seaside Groundwater Basin shall be required to submit a groundwater recharge/hydrology analysis as part of the development application for review and approval by the County of Monterey. The analysis shall demonstrate a no-net reduction in groundwater storage and include the following items related to groundwater recharge:

A. Groundwater Resources. Four items shall be quantified and discussed in the Report as follows:

1. Hydrogeologic environment shall include aquifer identification and characterization, groundwater basin delineation, well yields, and a characterization of soils. This shall include a determination of whether the proposed water source has hydrogeological connectivity with the Carmel Valley Alluvial Aquifer system or the Big Sur River Watershed.

[1] Refer also to Protecting our Water and Environmental Resources v. County of Stanislaus (2020) in Section 4.10.1.2.

2. Groundwater levels and flow shall include a discussion of groundwater levels, a groundwater contour map, and a discussion of any seasonal and/or long-term fluctuations. The Report shall also include a discussion of the recharge areas, and the amount of recharge shall be quantified using monthly time-step methodology. It shall also evaluate the impact of pumping on neighboring wells. The Report shall include an evaluation of ground water conditions and variations, including hydrologic changes caused by the development (e.g. introduction of sewage effluent and irrigation water to the groundwater system and alteration in surface drainage)

3. Groundwater in storage shall be quantified by discussing the amount of groundwater in storage and the amount that can be recovered.

4. Groundwater quality shall be discussed and any impacts on the groundwater by the proposed project shall be discussed and measures listed.

B. Water Demand. The current water use for the site shall be described, quantified and documented. The projected water demand for the proposed project shall be described and quantified (show source of information and method of calculations).

C. Water Balance. Discuss and calculate the water balance for the proposed project using monthly time-step methodology. The groundwater recharge shall include groundwater inflow plus the average precipitation minus evapotranspiration, runoff or streamflow, and soil moisture demands. The net groundwater recharge minus the existing demand and proposed project water demands equals change in storage. The Report shall identify the long-term safe yield of the aquifer and the long-term source of water for the proposed project.

D. Design of Recharge Areas. The Report shall include information on the design of groundwater recharge areas. Design may include management of impervious surfaces, water impoundments (retention/detention structures), protecting and planting vegetation, use of permeable paving materials, bioswales, water gardens, and cisterns, and other measures to increase runoff retention and enhance groundwater recharge.

E. Consistency with Groundwater Sustainability Plan. The Report shall include information to demonstrate compliance with the applicable Groundwater Sustainability Plan.

**MM HYD-CONS-2:** Applicants for developments streamlining under the Consistency Process on opportunity sites located within Sustainable Groundwater Management Act-designated high priority (critically over drafted) groundwater basins, high priority groundwater

basins, or the adjudicated Seaside Groundwater Basin shall be required to submit a groundwater recharge/hydrology analysis as part of the development application for review and approval by the County of Monterey.

Refer to MM-HYD-OBJ-1(A) through (E) for a list of requirements and standards for the groundwater recharge/hydrology analysis.

### Significance of Impact After Mitigation

Future development of a project facilitated by the HEU6 would comply with all applicable regulations and development requirements of the County as they relate to site design, stormwater management, and groundwater infiltration. MM-HYD-OBJ-1 and MM-HYD-CONS-2 would require the preparation and submittal of groundwater recharge/hydrology analysis for all residential projects processing under the HEU6 that are in critically over drafted, high priority basins. However, even with compliance with development requirements and implementation of mitigation measures, some of the new development facilitated by the HEU6 would rely on groundwater supplies in critically over-drafted groundwater basins, and given the critical importance of groundwater recharge and sustainable management, impacts to groundwater recharge and supplies would remain significant and unavoidable.

## 4.10.5.3 Threshold 3: Site Drainage and Hydrology

**Threshold 3:** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- Result in substantial erosion or siltation on- or off-site?
- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- Impede or redirect flood flows?

### Impact Analysis

#### *Erosion and Siltation*

Construction activities on any given opportunity site would temporarily alter the existing drainage patterns. As discussed under Section 4.10.5.1, construction activities could increase soil erosion due to earthmoving activities such as excavation, grading, soil compaction and moving, and soil stockpiling, resulting in sediment transport in runoff. Any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions requiring development and implementation of a

Stormwater Pollution Prevention Plan with associated BMPs to control for erosion. All such development, regardless of size, is subject to the Monterey County Stormwater Ordinance, which requires the control pollutant (including erosion) discharge to the maximum extent practicable and the Monterey County Erosion Control Ordinance, which requires development and approval of a project-specific erosion control plan prior to the start of any grading or clearing of a project requiring a building, grading, or land clearing permit. Adherence to these regulations and standards would minimize the potential of erosion and siltation during construction facilitated by the HEU6 and impacts would be less than significant.

Once construction is complete, exposed soils are typically stabilized with compaction, structural development, hardscape, and landscaping, thereby reducing the potential for erosion on-site. However, an increase in impervious surfaces could result in changes in drainage patterns and stormwater flows such that erosion is affected off-site. Future project compliance with applicable 2010 General Plan, Area Plan, Master Plan, and other Local Costal Program Land Use Plan policies, the Phase II MS4 permit, the Monterey County Stormwater Ordinance, the Monterey County Erosion Control Ordinance, the PCRs, and other such applicable laws would result in site design incorporation of runoff retention and peak flow control. Such runoff flow control would be designed to capture anticipated peak rainfall events and control its discharge from the site through storage, rainwater harvesting, infiltration, or other means as deemed appropriate. Site design requirements include, but are not limited to, assessing existing topography, creating drainage management areas, accounting for existing drainage infrastructure, and retaining contiguous hydrologic features to the extent practicable. Therefore, mandatory compliance with stormwater flow controls during site design review would minimize the potential to increase erosion and siltation on- and off-site. Impacts would be less than significant.

#### *Stormwater Drainage System and Localized Flooding*

Future development facilitated by the HEU6 would increase impervious surfaces at individual opportunity sites throughout UMC, thereby potentially increasing localized stormwater runoff. Substantial increases in stormwater runoff could exceed the capacity of existing stormwater drainage systems in these areas. Future projects subject to the PCRs would be required to develop a project-specific Stormwater Control Plan that demonstrates how the project meets the runoff and stormwater control requirements in conjunction with existing and proposed stormwater drainage infrastructure. As stated above, typical runoff flow control would be designed to capture anticipated peak rainfall events and control its discharge. These controls could include rainwater harvesting barrels, retention basins, and biofiltration basins, all of which would contribute to the control of stormwater runoff and discharge to prevent flooding on- and off-site. Therefore, impacts to the existing stormwater drainage system would be less than significant.

### *Redirection of Flood Flows*

Flooding from storm events is a critical issue in Monterey County, due to the historical increase in development within flood-prone river valleys such as the Salinas Valley, Pajaro Valley, and Carmel Valley. Flooding is also an issue near the streams and rivers draining along the coast. Development within floodplains can impede or redirect flood flows through the introduction of new structures and infrastructure changing the way floodwaters move in each area. Of the 56 opportunity sites, 24 are within a FEMA flood zone, as shown in Table 4.10-4 and Figure 4.10-2a through 4.10-2i. 15 of these sites are considered non-vacant: Opportunity Sites 3, 13, 14, 24, 30, 37, 49, 50, 51, 54, 56, and 64 have some level of structural development on site; Opportunity Sites 20 through 22 contain agricultural uses; and Opportunity Site 35 is a parking lot. As such, these sites with existing development already have the potential to redirect flood flows, which would continue with redevelopment.

As discussed under Thresholds 1, 2, and 3 above, development facilitated by the HEU6 would be subject to stormwater management regulations, like the PCRs, which require structural stormwater control measures (e.g., retention basins and stormwater conveyance infrastructure) to be adequately sized for substantial rainfall events. Additionally, development within floodplains is subject to the requirements of Chapter 16.16 – Regulations for Floodplains in Monterey County, of the County Code (Floodplain Regulation), which regulates development in special flood hazards areas. A special flood hazards area encompasses Zones A, AO, AE, AR, A99, AH, VE, and V as shown on a FEMA FIRM. In addition to protecting public safety, the Floodplain Regulations include requirements and restrictions to (County of Monterey 2024):

1. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Control filling, grading, dredging, and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

Per Section 16.16.50(J) of the County Code, the County prohibits new construction, substantial development, or other development (including fill of soils), within floodways (FEMA Zone AE) or an adopted Regulatory Floodway. Development in these zones is only permitted if it is demonstrated by a registered civil engineer that the cumulative effect of the development will not result in any increase in base flood levels of an adopted Regulatory Floodway or will not increase the water surface elevation of the base flood by more than 1 foot in Zone AE. If such requirements are met, then development within flood zone must comply with all applicable flood hazard

reduction provision in Section 16.16.50 of the County Code. An example of such requirements are flood openings, which require all new construction with fully enclosed areas subject to flooding (such as parking, storage, and access) to be designed to automatically allow for the entry and exit of floodwater. Another example includes requiring new construction to have its lowest floor elevated to at least 1 foot above the base flood elevation. The HEU6 proposes split zoning on Opportunity Sites 11 through 15, and 56 that contain floodway, thereby avoiding new construction or substantial development on floodway. No split zoning is proposed on Opportunity Site 3, however, only a small portion of eastern boundary encroaches on floodway, and development in this area is likely to be avoided.

The County requires review of all development permit applications subject to the Floodplain Regulations to determine that all local, state, and federal requirements are met and if the proposed development adversely affects the flood capacity of the area. New development facilitated by the HEU6 in the floodway and other applicable flood hazard zones would be subject to the County's Floodplain Regulations such that each individual project, in the context of all cumulative development, would not substantially alter the existing drainage pattern and impede or redirect flood flows. Therefore, compliance with the County's Floodplain Regulations would result in less than significant impacts.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.10.5.4 Threshold 4: Activities in Flood Hazard, Tsunami, or Seiche Zone

**Threshold 4:** In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

### Impact Analysis

In addition to flood hazards defined by FEMA discussed under Section 4.10.5.3, future development may be subject to other forms of inundation from dam failure, tsunami, or seiche. Because all 56 opportunity sites are not adjacent to an enclosed body of water, inundation from seiche is not likely and therefore is not discussed further.

As shown on Figures 4.10-3a through 4.10-3i, opportunity sites within the vicinity of Castroville (Opportunity Sites 11 through 15, 30, and 41 in North County Area Plan (Inland) Area) are adjacent or near the tsunami hazard area defined by the DOC. These areas currently have existing development in the tsunami hazard area. It is important to note that the tsunami hazard area represents the maximum tsunami runup based on the best information available.

Summarized in Table 4.10-5 and shown on Figures 4.10-4a through 4.10-4i, seven opportunity sites are in dam inundation zones (Opportunity Sites 11 through 15 in the North County Inland Area Plan Area, 24 in the Toro Area Plan Area, and 56 in the Carmel Valley Master Plan Area). Development in Castroville would be developed consistent with Castroville Community Plan Policy 10.5 which requires flood control improvements for existing communities and new development (Opportunity Sites 11 through 15). Opportunity Sites 11 through 15 and 24 are over 70 miles from the San Antonio and Nacimiento dams; Opportunity Site 56 is approximately 12 miles from the Los Padres dam. The split zoning strategy as part of the HEU6 would consider buffer requirements to strategically rezone portions of the opportunity sites outside required buffer areas. Furthermore, split zoning is proposed for Opportunity Site 56 to avoid residential development in dam inundation areas. Opportunity Sites 11 through 15 are entirely in dam inundation areas; therefore, split zoning would not reduce dam inundation impacts.

DSOD rates the downstream hazard for the Pacific Grove, Salinas River Diversion, and Black Rock Creek dams as "Low"; therefore, no inundation mapping is required. The "Low" classification means that there is no probable loss of human life and environmental losses. No opportunity sites are located within the vicinity of these dams, and the Salinas River Diversion is already in the San Antonio and Nacimiento dams' inundation area. The Silacci dam is northeast of Salinas. Although DSOD has determined the downstream hazard of this dam is "Significant," no inundation mapping is currently available. The "Significant" classification means DSOD determine that no probable loss of human life would occur, but dam failure can cause economic loss, environmental damage, impacts to critical facilities, or other impacts.

The DSOD rates the condition of the Forest Lake, Los Padres, Nacimiento, Pacific Grove, Salinas River Diversion, and Black Rock Creek dams as "Satisfactory" and the San Antonio and Silacci dams as "Fair," with "Satisfactory" being the highest condition rating possible. The Los Padres, San Antonio, Nacimiento dams each have downstream hazard classifications of "Extremely High" with Opportunity Sites 11 through 15, 24, and 56 located within mapped inundation areas. As stated previously, the downstream hazard is based solely on potential downstream impacts to life and property should the dam fail when operating with a full reservoir. This hazard is not related to the condition of the dam or its appurtenant structures.

The northern coastal area (including the communities of Boronda, Castroville, Moss Landing) and the Salinas Valley face the greatest risk of dam failure in Monterey County by two Monterey

County Water Resources Agency owned dams (Nacimiento and San Antonio). The Carmel Valley also faces flood risk from failure of the Los Padres dam. Additionally, any inundation from failure of the Forest Lake Dam would occur in the Pebble Beach community. Dam failure and tsunamis are both considered extreme and rare flood events. Development of these future projects at opportunity sites in these dam inundation areas would not alter or affect the condition of any dam. The most likely location of a damaging levee failure would be at the Pajaro River Levee (which failed previously, or at one of the many non-engineered earthen levees along the Salinas River and Carmel River. Nevertheless, development in these flood hazard areas have the potential to release pollutants if inundated.

As previously discussed under Thresholds 1 and 3, new development within flood hazard areas are subject to design review related to flood management and water quality treatment controls prior to the issuance of development permits. The County uniformly applies regulations to minimize risks related to potential flooding, including requiring minimum setbacks from watercourses and floodways. Compliance with the Monterey Stormwater Ordinance and Floodplain Regulations would protect new development and surrounding communities from risk of pollutant release during a flood event. Therefore, impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.10.5.5 Threshold 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

**Threshold 5:** Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

### Impact Analysis

#### *Water Quality Control Plan*

The primary water quality control plan for the County is the Basin Plan for the Central Coastal Basin implemented by the Central Coast RWQCB. Within the Basin Plan are water quality objectives and standards which must be maintained to allow for the continued beneficial uses of waters in the region. Future development facilitated by the HEU6 has the potential to introduce pollutants to receiving waters managed by the Basin Plan. Construction activities could increase

soil erosion due to earthmoving activities and also introduce typical pollutants (e.g., fuels, lubricants) and materials (e.g., metals, plastics, debris). Post-construction, future development has the potential to affect water quality through the increase in impervious surfaces and through the use of commercially available products such as cleaning products, oil, gas, pesticides, fertilizers, sediment, and other debris. The Central Coast RWQCB implements the Basin Plan by issuing and enforcing waste discharge permits. As described under Threshold 1, construction and operation of future projects under the HEU6 would comply with the NPDES Construction General Permit and the Phase II MS4 permit, along with other local water quality requirements such as the Monterey Stormwater Ordinance, applicable policies from land use plans, and PCRs. With implementation of these regulations during future project design, construction, and operation, the project would not obstruct the Basin Plan. Impacts would be less than significant.

#### *Groundwater Management Plans*

In Monterey County, there are currently seven approved GSPs and alternative plans used to inform and implement sustainable groundwater management in compliance with the Sustainable Groundwater Management Act: Langley Area GSP, 180/400 Foot Aquifer GSP (under periodic review), Monterey GSP, East Side Aquifer GSP, Forebay Aquifer GSP, Upper Valley Aquifer GSP, and the Pajaro Valley Basin Management Plan. Each GSP covers a defined plan area encompassing a medium or high priority (including critically over-drafted) basin and includes elements such as a sustainability goal, groundwater conditions, a water budget, and a description of projects or steps to achieve and maintain sustainability of the basin. A key component of a GSP, the water budget is a modeled accounting of total surface water and groundwater entering and leaving the basin. Within a GSP, a historical, current, and projected water budget is determined. The projected water budget provides the foundation for determining the projects and actions required to sustainably maintain the groundwater basin. The project water budget is based on numerous factors and data sources including precipitation, climate change scenarios, future land use, future demands, hydrological models, relevant water planning studies, and adjacent basin GSPs (as applicable).

The Seaside Sub-basin is in an adjudicated basin, not required under the Sustainable Groundwater Management Act to prepare and carry out a Groundwater Sustainability Plan. Instead, the court established the Seaside Groundwater Basin Watermaster through the adjudication. The Seaside Groundwater Basin's court-appointed Watermaster's primary role is to administer and enforce the provisions of the Decision filed February 9, 2007, by the Superior Court in Monterey County under Case No. M66343 – California American Water v. City of Seaside et al. One provision of the Decision is the requirement to develop a Monitoring and Management Plan, which the Watermaster developed in May 2006. The Monitoring and Management Plan included a recommendation to prepare a Basin Management Plan. The first Basin Management Plan, titled the Seaside Groundwater Basin Management Action Plan (BMAP), was completed in February

2009. This current 2018 BMAP was prepared in 2018 with the benefit of nine additional years' worth of groundwater data and an enhanced understanding of the Seaside Basin. A discussion of management actions that have been implemented in the Seaside Basin since the 2009 BMAP and the impacts of those actions. Additional management actions and strategies that the Watermaster should support and encourage are recommended as a means to help meet groundwater pumping reductions required by the Decision, and to help prevent seawater intrusion.

The project identifies 56 opportunity sites across the UMC (except Opportunity Site 53 in the City of Marina) and proposes rezoning to increase possible housing capacity to meet regional housing needs and accommodate the County's Regional Housing Needs Allocation target consistent with state housing goals. Overall, the HEU6 would facilitate land use intensification beyond that contemplated under current land use plans. As such, this change in land use and corresponding water demand has not been accounted for in any of the groundwater basin management plans in Monterey County. Land use and demand, however, are only a portion of the factors used to determine sustainable management under a GSP. The goal of each GSP is to sustainably manage, protect, and enhance groundwater resources in each respective basin while still allowing for managed growth through careful monitoring of groundwater conditions. GSPs require periodic evaluation and updating to ensure implementation is still working toward achieving its sustainability goal. Similarly, the 2018 BMAP for the Seaside Basin focuses on groundwater management actions to reduce the risk of seawater intrusion through groundwater recharge, decreasing groundwater demand (via water conservation), and changes in operational management of wells.

On an individual project basis, compliance with the Phase II MS4 permit, the Monterey County Stormwater Ordinance, the PCRs, and other applicable regulations would require site designs to incorporate runoff retention and infiltration basins. Additionally, some of the opportunity sites are not vacant. Redevelopment of these developed sites would result in minor changes in groundwater recharge. Depending on project-specific circumstances, redevelopment of an individual site could result in an increase in groundwater infiltration resulting from new landscaping and compliance with more stringent site design regulations.

As discussed under Section 4.10.5.2, groundwater management is of critical importance to the County as it is the primary source of water supply to meet potable water demand. The HEU6 includes Implementation Program H-2.L. Collaboration with Water Resources Agencies, including a measure to coordinate with groundwater sustainability agencies to align future affordable housing developments with the provisions of GSP. Housing development facilitated by the HEU6 would result in an increase in groundwater demand and change in groundwater recharge across the region. The overall intensification of land uses resulting from the HEU6 could conflict with and exceed the current projections in a given GSP. Through Program H-2.1L, the County would continue to work with groundwater sustainability agencies to account for housing developments implemented under the HEU6 in long-term projections and planning in the GSPs.

Therefore, development facilitated by the project could conflict with sustainable groundwater management planning efforts and impacts would be potentially significant. Refer also to Section 4.18 for additional discussion of groundwater as it relates to demand and use.

### Significance of Impact

Less than significant impacts for the water quality control plan and potentially significant impacts for sustainable groundwater management plans.

### Mitigation Measures

GSPs establish sustainable management criteria for sustainability indicators (e.g., chronic lowering of groundwater elevations, seawater intrusion, reduction of groundwater storage, degradation of groundwater quality, land subsidence, and depletion of interconnected surface water). They provide minimum thresholds and measurable objectives to achieve desired groundwater conditions and avoid undesirable results. GSPs also identify projects and management actions that support groundwater sustainability, including but not limited to actions involving water charges framework, pumping allowances, and reservoir reoperation. Coordination between the County and GSAs will be required for long-term implementation of the HEU6 as identified in Implementation Program H-2.L. MM-HYD-OBJ-1 and MM-HYD-CONS-2 identified above will be required of all projects under the HEU6 to improvement groundwater recharge in developing areas of critically over drafted and high priority basins.

### Significance of Impact After Mitigation

Even with implementation of ongoing coordination between the County and GSAs and MM-HYD-OBJ-1 and MM-HYD-CONS-2, impacts would remain significant and unavoidable.

## 4.10.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to hydrology and water quality that could result from implementation of the project.

### 4.10.6.1 Cumulative Threshold 1: Water Quality Standards

Cumulative impacts to water quality standards could occur if the project, in combination with other cumulative projects, incrementally lead to an increase in polluted discharge into water bodies throughout the UMC. It is possible for projects throughout the UMC to occur near each other and simultaneously, which could, for example, lead to an increase in erosion potential in an area with multiple ongoing construction projects. Similarly, future development projects in conjunction with cumulative projects would lead to an overall increase in impervious surfaces and new land uses that contribute to changes in stormwater runoff flow and pollutant sources in an area. Just as future development facilitated by the HEU6 would be required to comply with the NPDES Construction General Permit, Phase II MS4 permit, the Monterey County Stormwater Ordinance, the Monterey

County Erosion Control Ordinance, applicable policies of land use plans, and the PCRs, it is reasonable to assume that cumulative projects would be subject to the same or similar standards. Therefore, water quality treatment of stormwater runoff would be addressed on a project-by-project basis, with each potential project complying with regional and local water quality requirements. Therefore, cumulative impacts to water quality standards would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.10.6.2 Cumulative Thresholds 2 and 5: Groundwater Recharge and Supplies and Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

Construction and operation of cumulative projects would comply with the NPDES Construction General Permit, the Phase I MS4 permit for the City of Salinas, the Phase II MS4 permit, along with other local water quality requirements such as the Monterey Stormwater Ordinance, PCRs, and those implemented by cities. Compliance with these regulations would incrementally achieve the water quality standards and objectives outlined in the Basin Plan. With implementation of these regulations during future project design, construction, and operation, cumulative impacts to the Basin Plan would be less than significant.

As discussed above, GSP activities are regularly monitored and re-evaluated for changing conditions. Projects and actions implemented by a GSP to achieve and maintain its sustainability goal are based on a wide variety of factors and are cumulative in nature. Each cumulative and future project would undergo site design and review to minimize adverse effects to infiltration and groundwater recharge. However, future projects would still be in critically over-drafted groundwater basins. Continued over-drafting of groundwater can lead to wells running dry, seawater intrusion, and land subsidence. Therefore, the project, in combination with cumulative projects would contribute to ongoing groundwater supply issues. Given the critical importance of groundwater recharge and sustainable management, along with cumulative project and new development facilitated by the project located within critically over drafted groundwater basins, impacts to groundwater recharge, supply, and GSP implementation would be potentially significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Future development of the project would comply with all applicable regulations and development requirements of the County as they relate to site design, stormwater management, and groundwater infiltration. Other cumulative projects outside the UMC would be subject to different site design requirements related to groundwater infiltration. Coordination between the County and GSAs will be required for long-term implementation of the HEU6 as identified in Implementation Program H-2.L. MM-HYD-OBJ-1 and MM-HYD-CONS-2 identified above will be required of all projects under the HEU6 to improvement groundwater recharge in developing areas of critically over drafted and high priority basins.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

#### 4.10.6.3 Cumulative Thresholds 3, and 4: Site Drainage and Hydrology and Activities in Flood Hazard, Tsunami, or Seiche Zone

Cumulative projects, in combination with future development facilitated by the HEU6, would result in an incremental increase in impervious surfaces in areas that overlie groundwater basins, changes in localized drainage, and possible development within a floodway. Each cumulative project requiring development permits would likely undergo design review to determine if any adverse effects to hydrology and flooding would occur, depending on the site-specific location. For the same reasons as the proposed project, cumulative project compliance with the Phase II MS4 permit, the Monterey County Stormwater Ordinance, Monterey Erosion Control Ordinance, Floodplain Regulation, the PCRs, applicable policies of land use plans, and other such similar applicable laws would result in site design incorporation of hydrological considerations. This would control post-development peak stormwater runoff flows and design with respect to potential flooding on a project-by-project basis. Therefore, cumulative impacts to site drainage, hydrology, and flooding would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

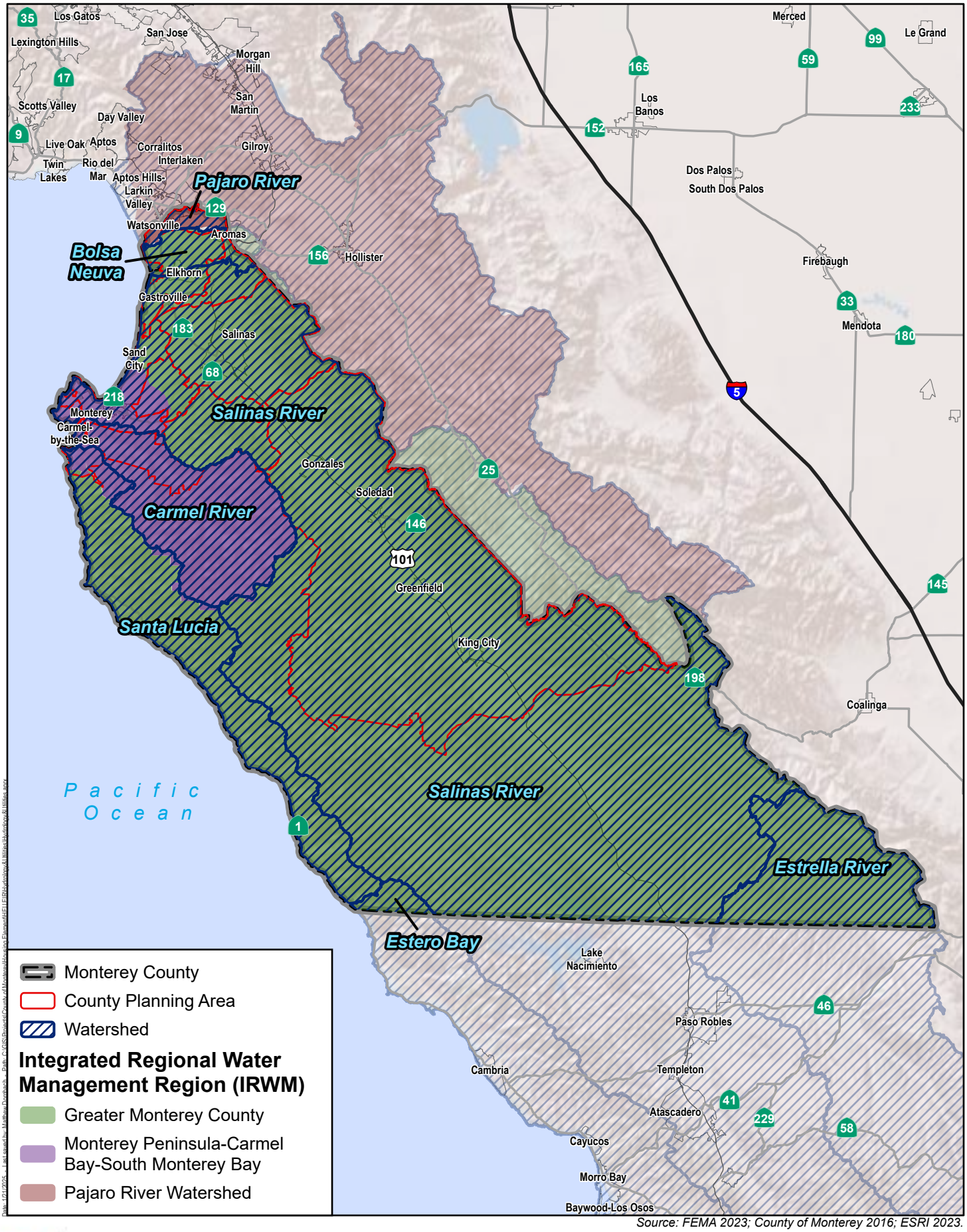
### Significance of Impact After Mitigation

Less than significant impact.

### 4.10.7 Conclusion

Impacts related to groundwater recharge, supply, and sustainable groundwater management planning would be potentially significant at the project and cumulative level. MM-HYD-OBJ-1 and MM-HYD-CONS-2 would reduce these impacts, but not to a level below significance. Therefore, impacts to groundwater recharge, supply, and sustainable groundwater management planning remain significant and unavoidable at the project and cumulative level. All other impacts related to hydrology and water quality would be less than significant, and no mitigation is required.

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

**Figure 4.10-1**
Watersheds and Integrated Regional Water Management Regions in Monterey County

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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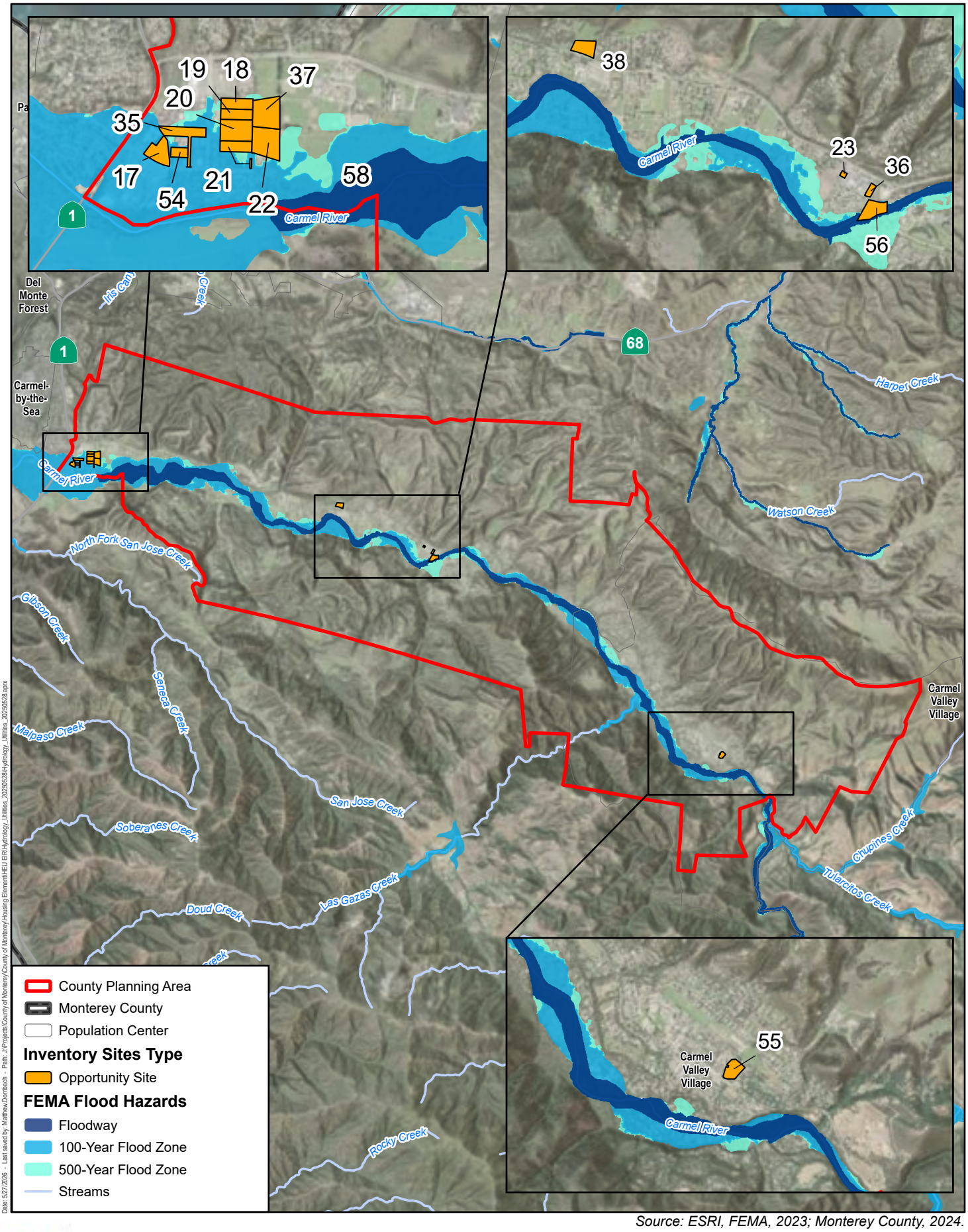
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**Figure 4.10-2a**

FEMA Flood Hazards Zones in Carmel Area Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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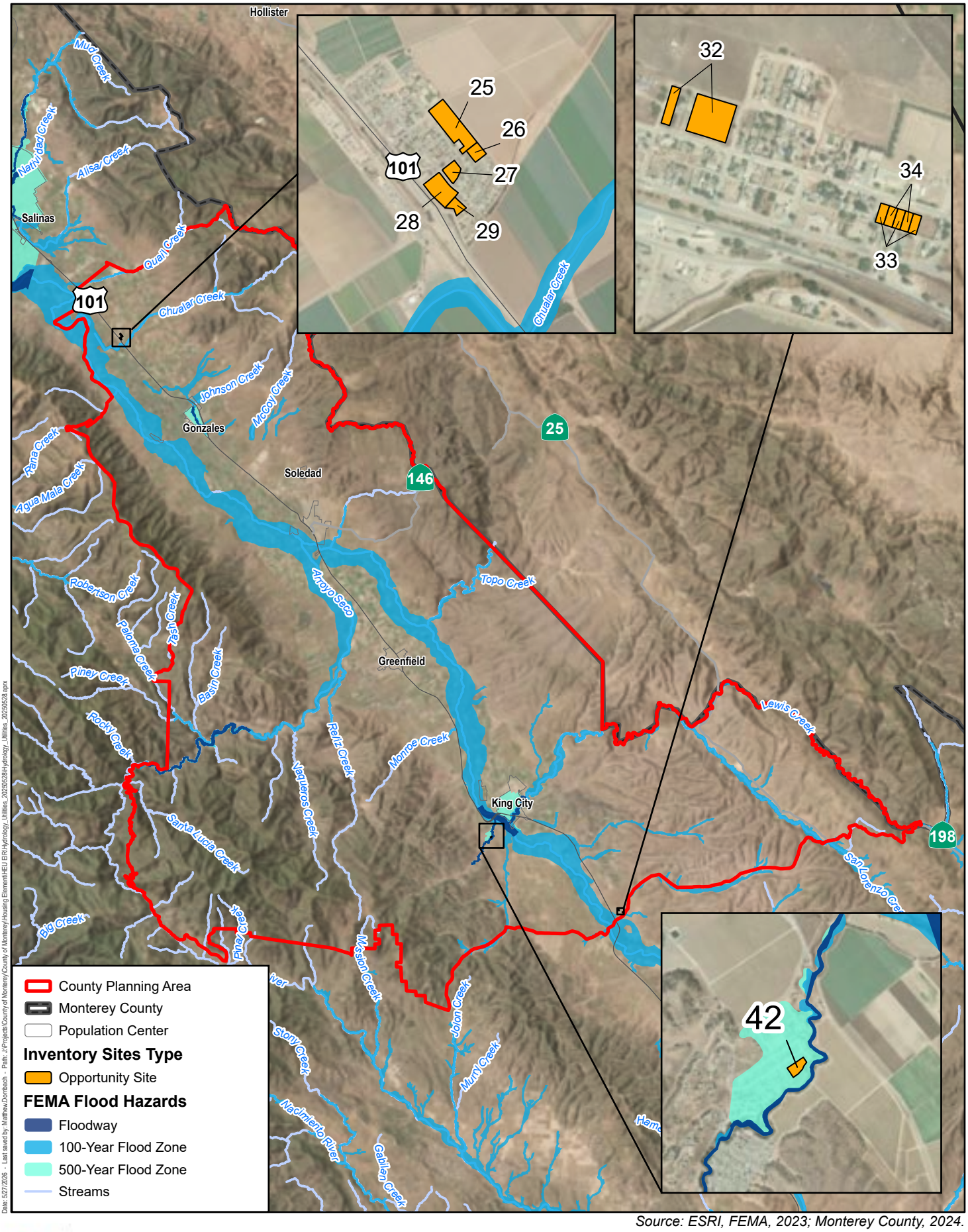
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**Figure 4.10-2b**

FEMA Flood Hazards Zones in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

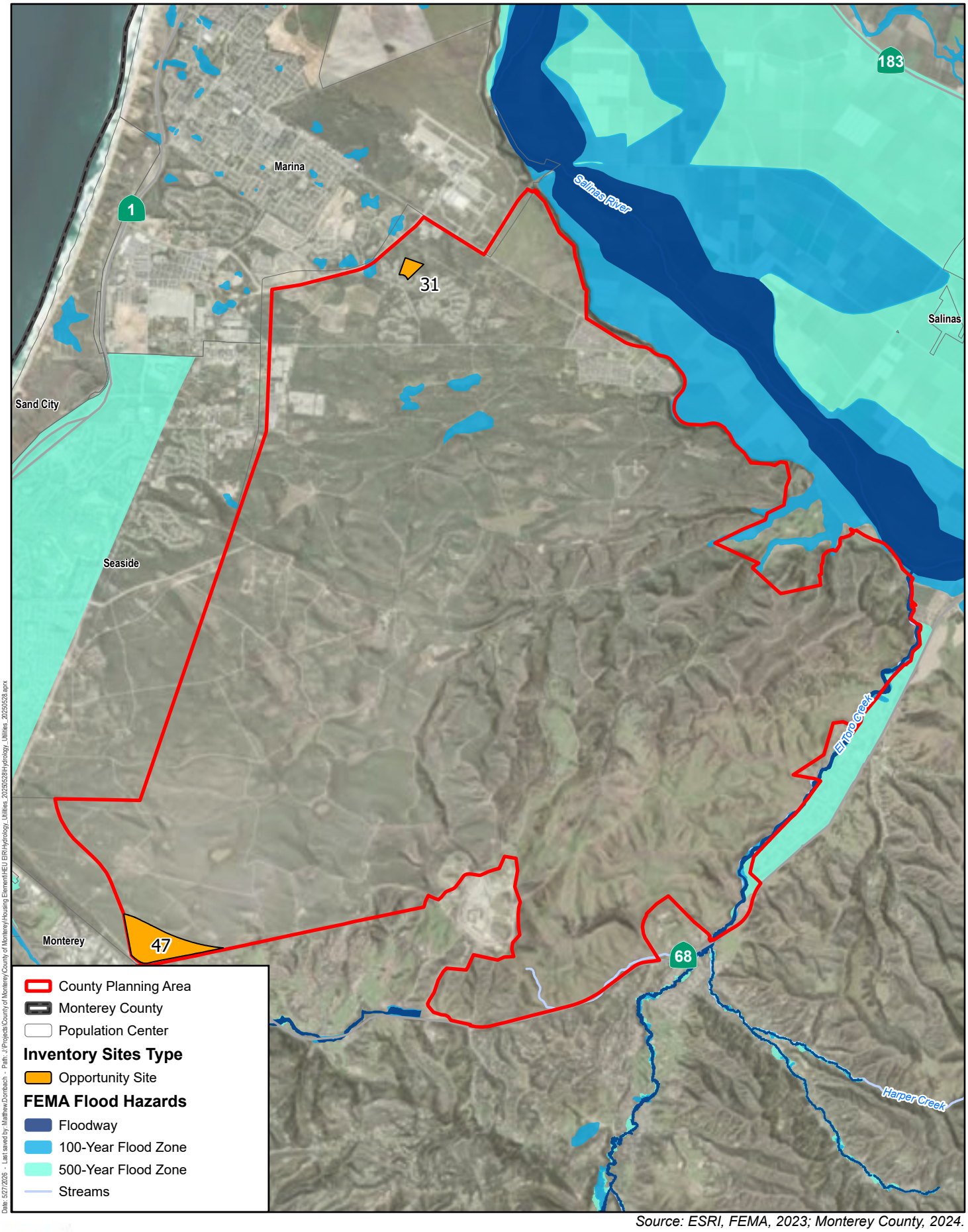
**Figure 4.10-2c**

FEMA Flood Hazards Zones in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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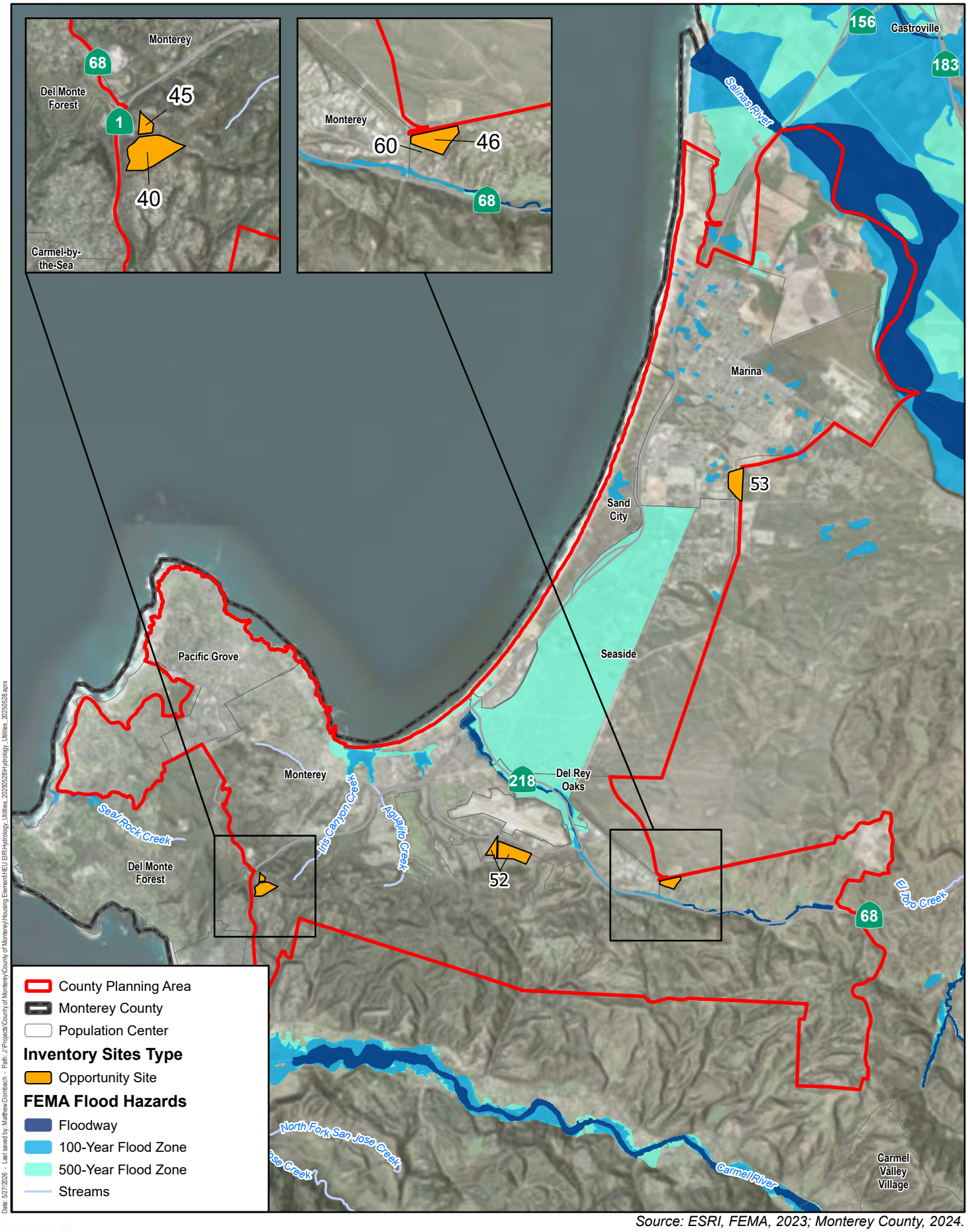
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**Figure 4.10-2d**

FEMA Flood Hazards Zones in Fort Ord Master Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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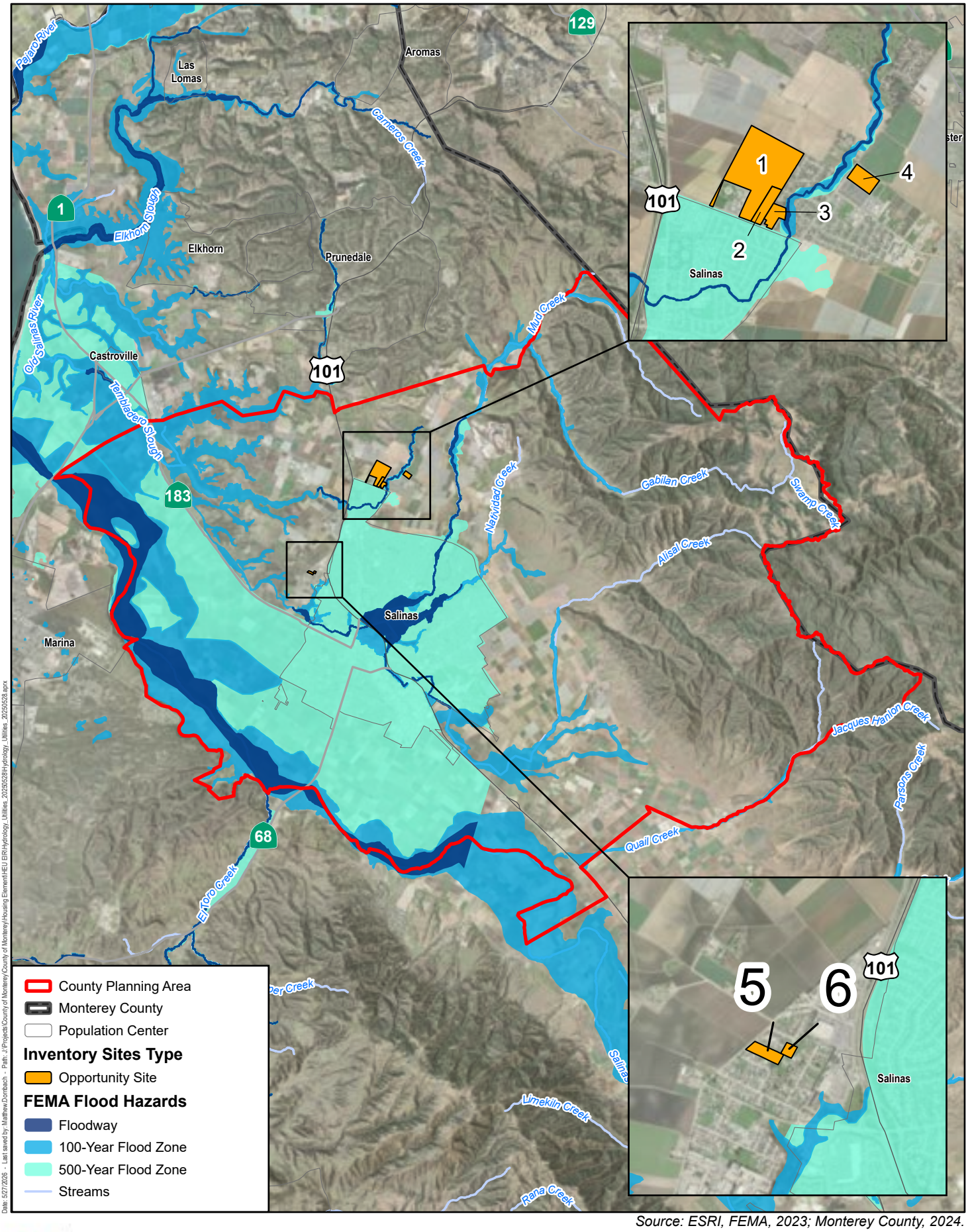
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**Figure 4.10-2e**

FEMA Flood Hazards Zones in Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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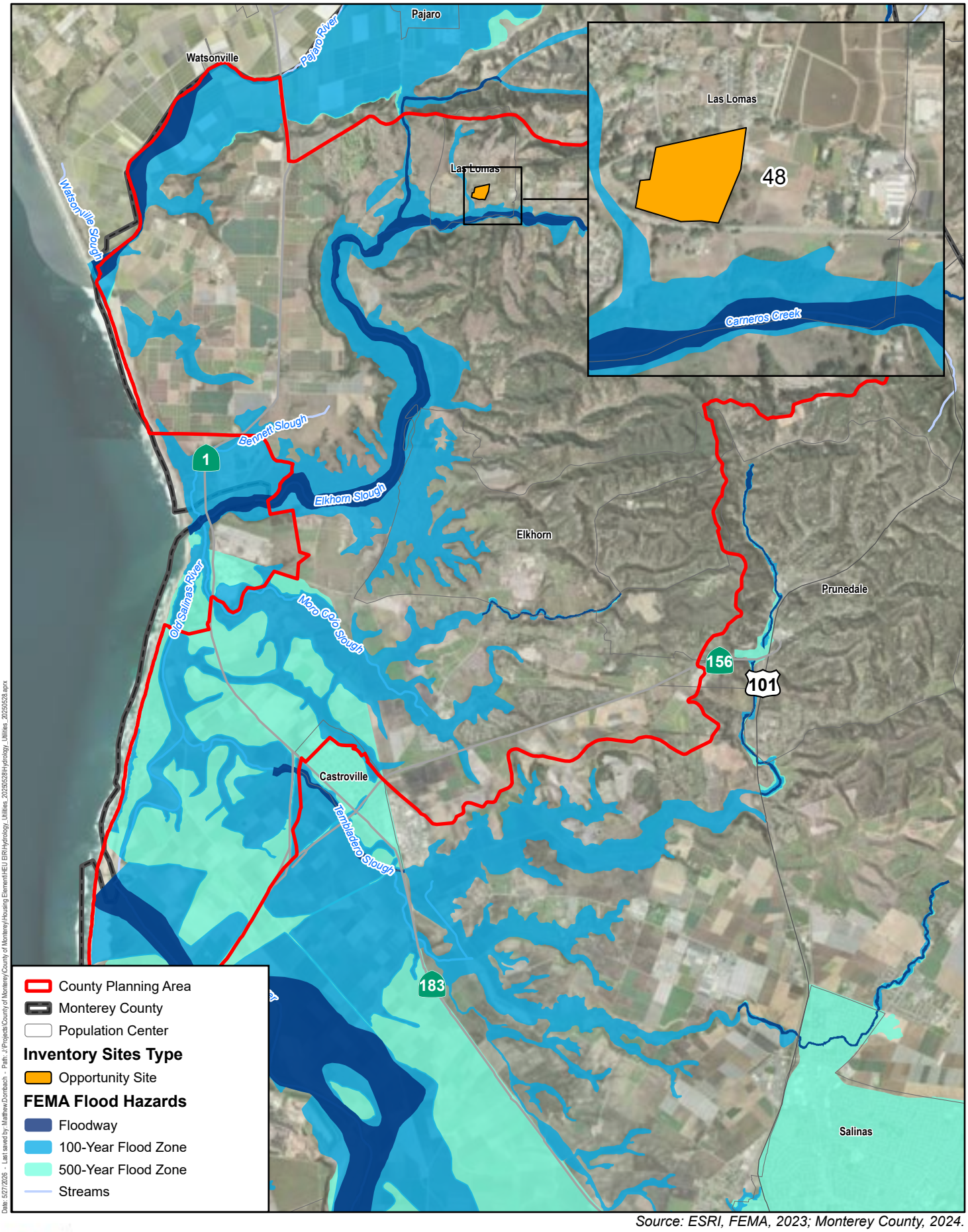
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**Figure 4.10-2f**

FEMA Flood Hazards Zones in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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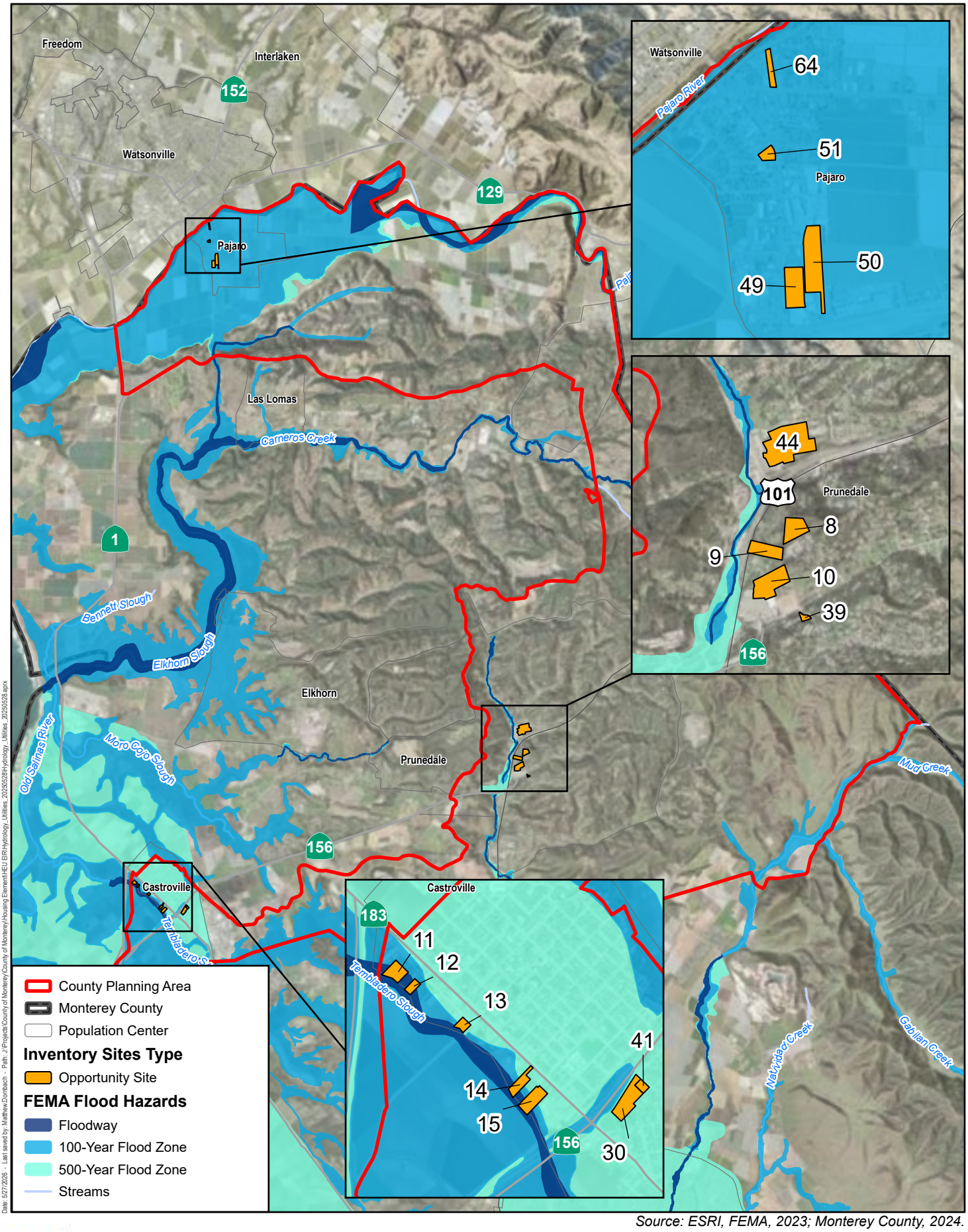
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**Figure 4.10-2g**

FEMA Flood Hazards Zones in North County Land Use Plan (Coastal)

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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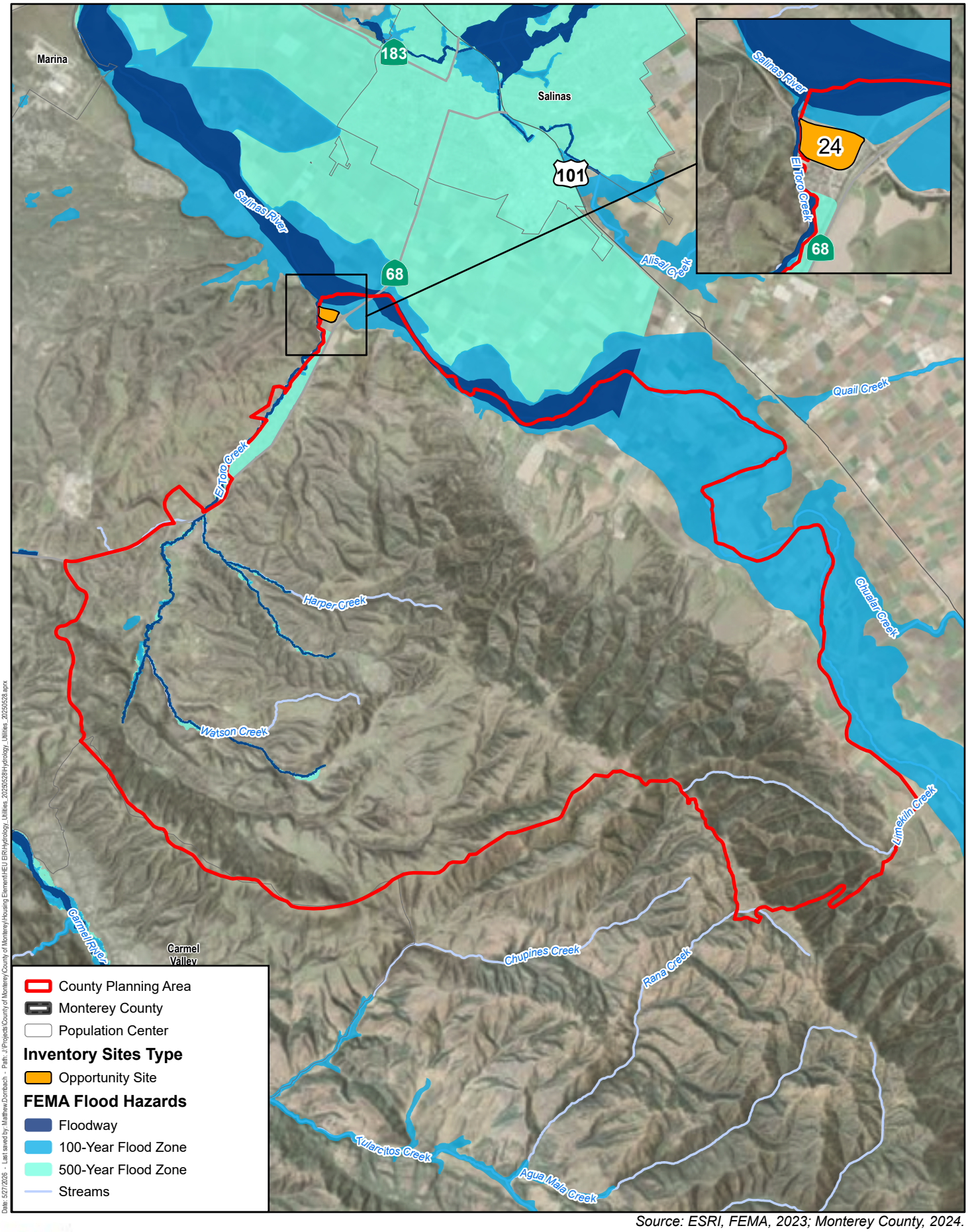
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**Figure 4.10-2h**

FEMA Flood Hazards Zones in North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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**Figure 4.10-2i**

FEMA Flood Hazards Zones in Toro Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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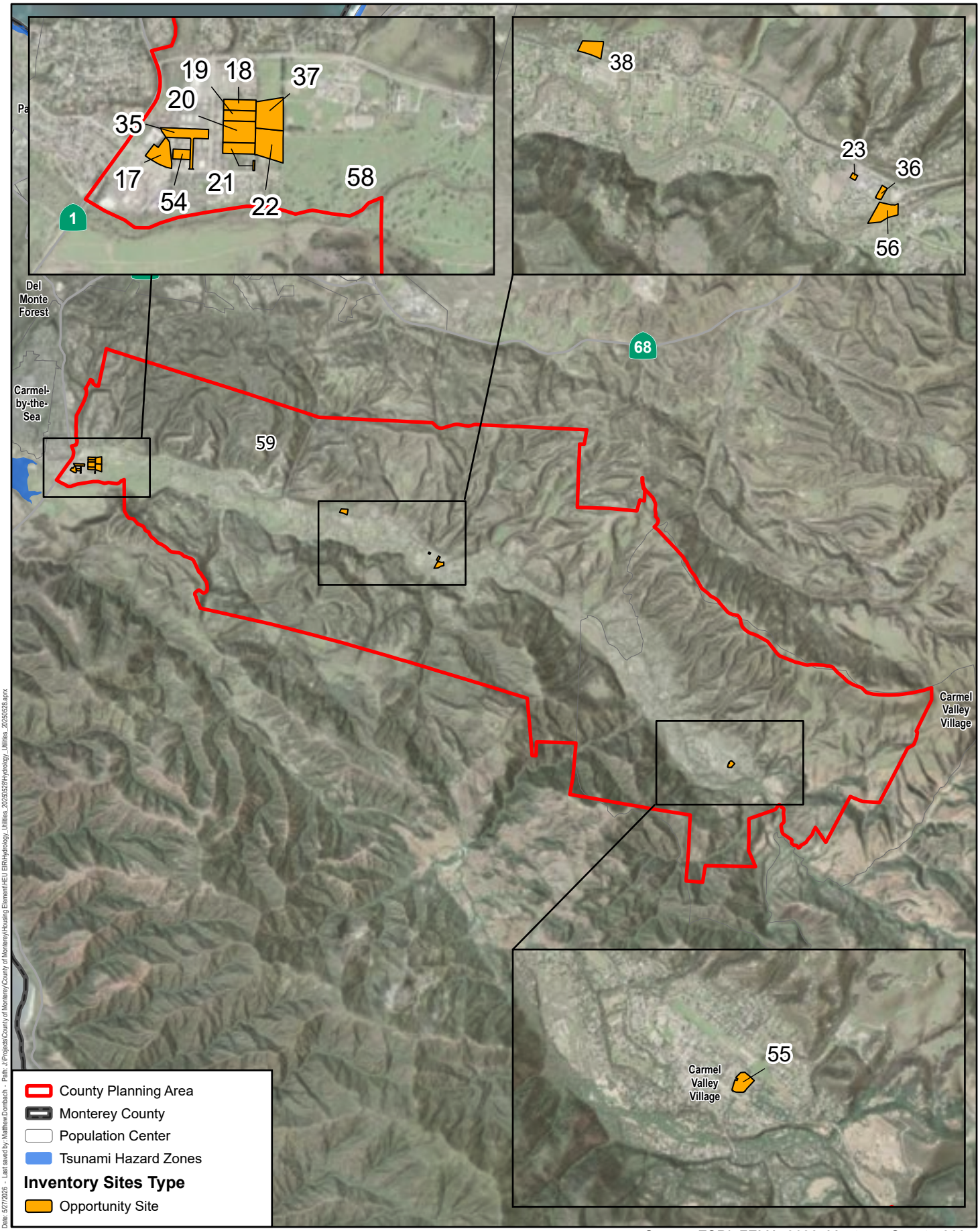
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**Figure 4.10-3a**

Tsunami Hazard Zones in Carmel Area Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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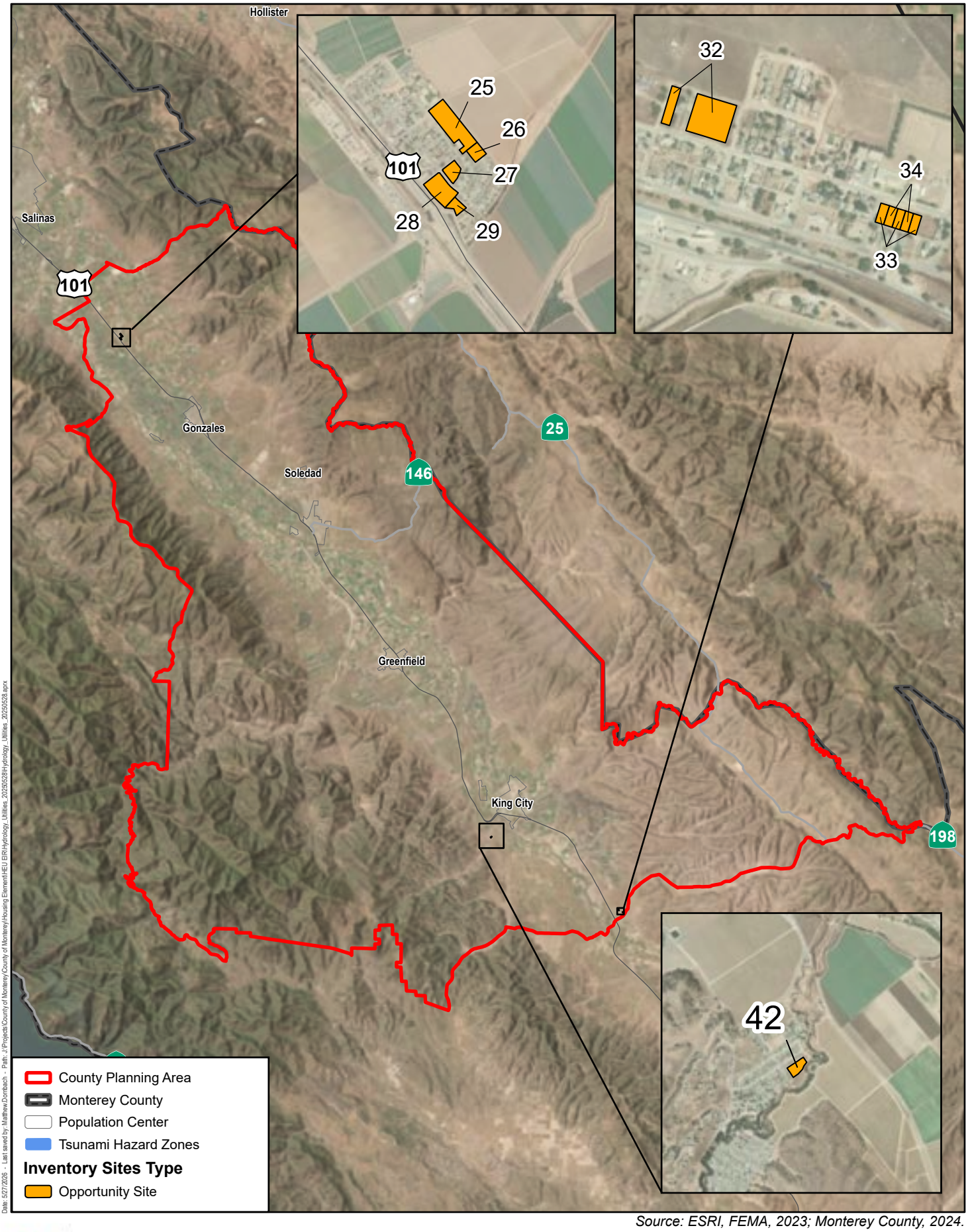
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**Figure 4.10-3b**

Tsunami Hazard Zones in Carmel Valley Master Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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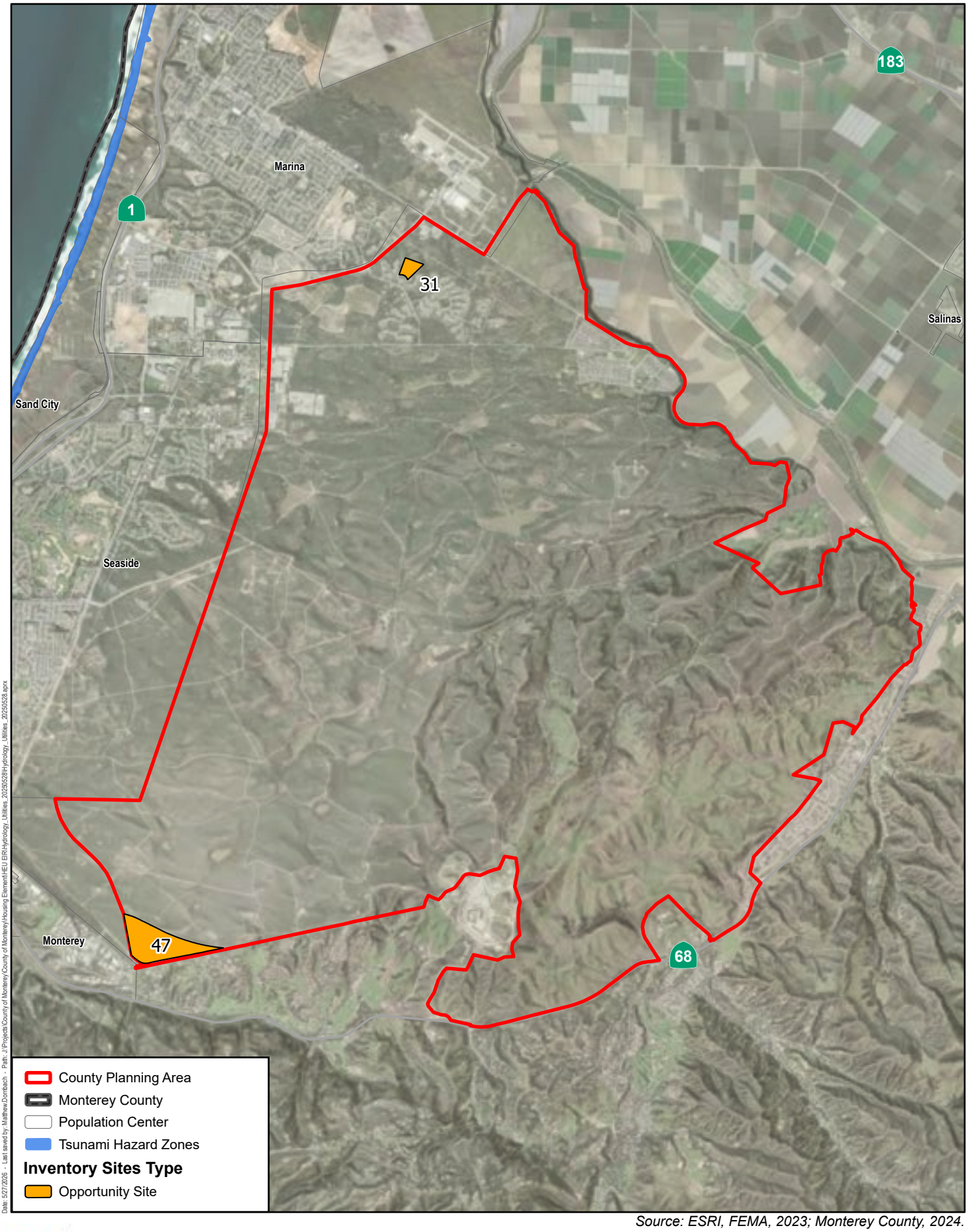
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**Figure 4.10-3c**

Tsunami Hazard Zones in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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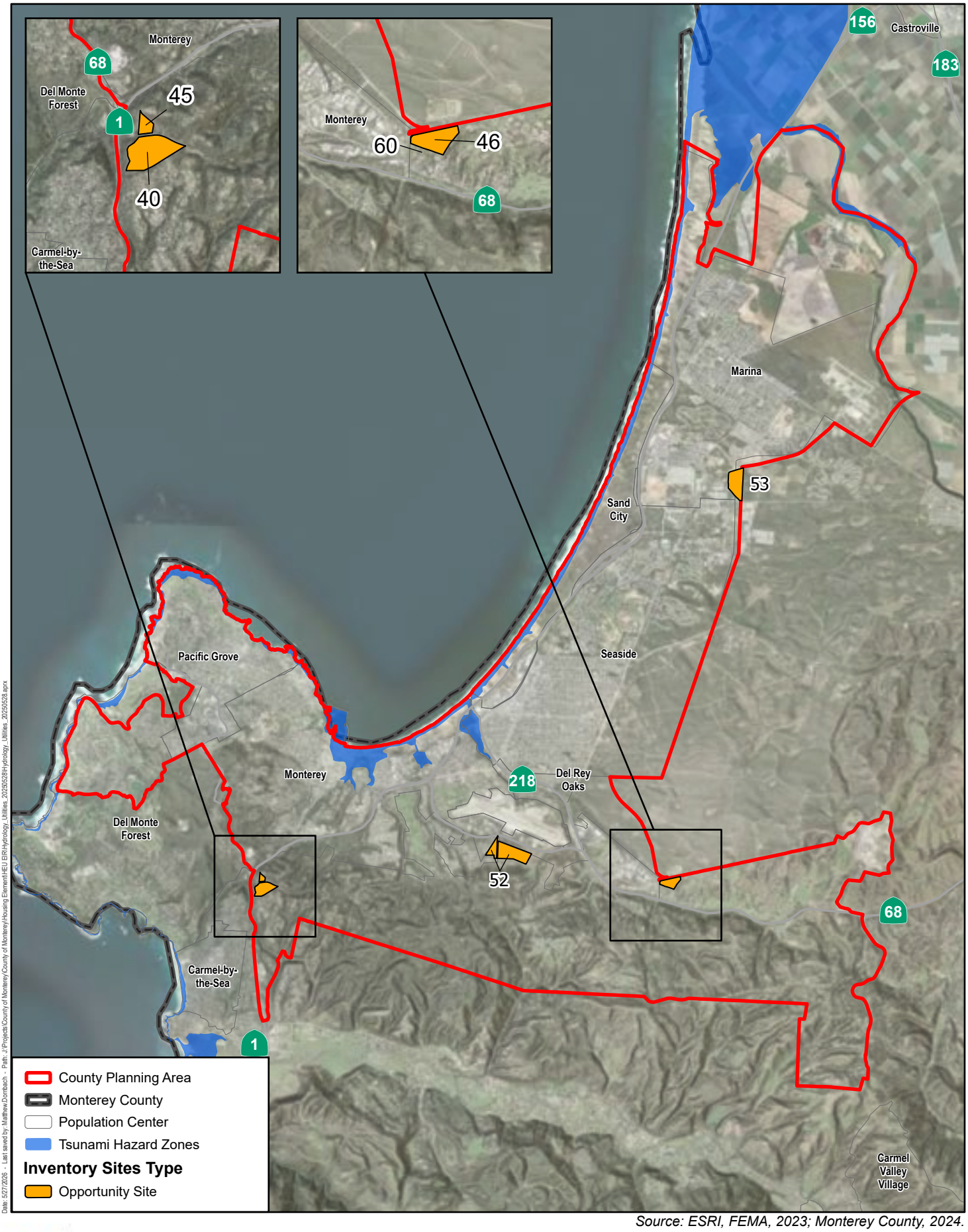

*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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**Figure 4.10-3d**

Tsunami Hazard Zones in Fort Ord Master Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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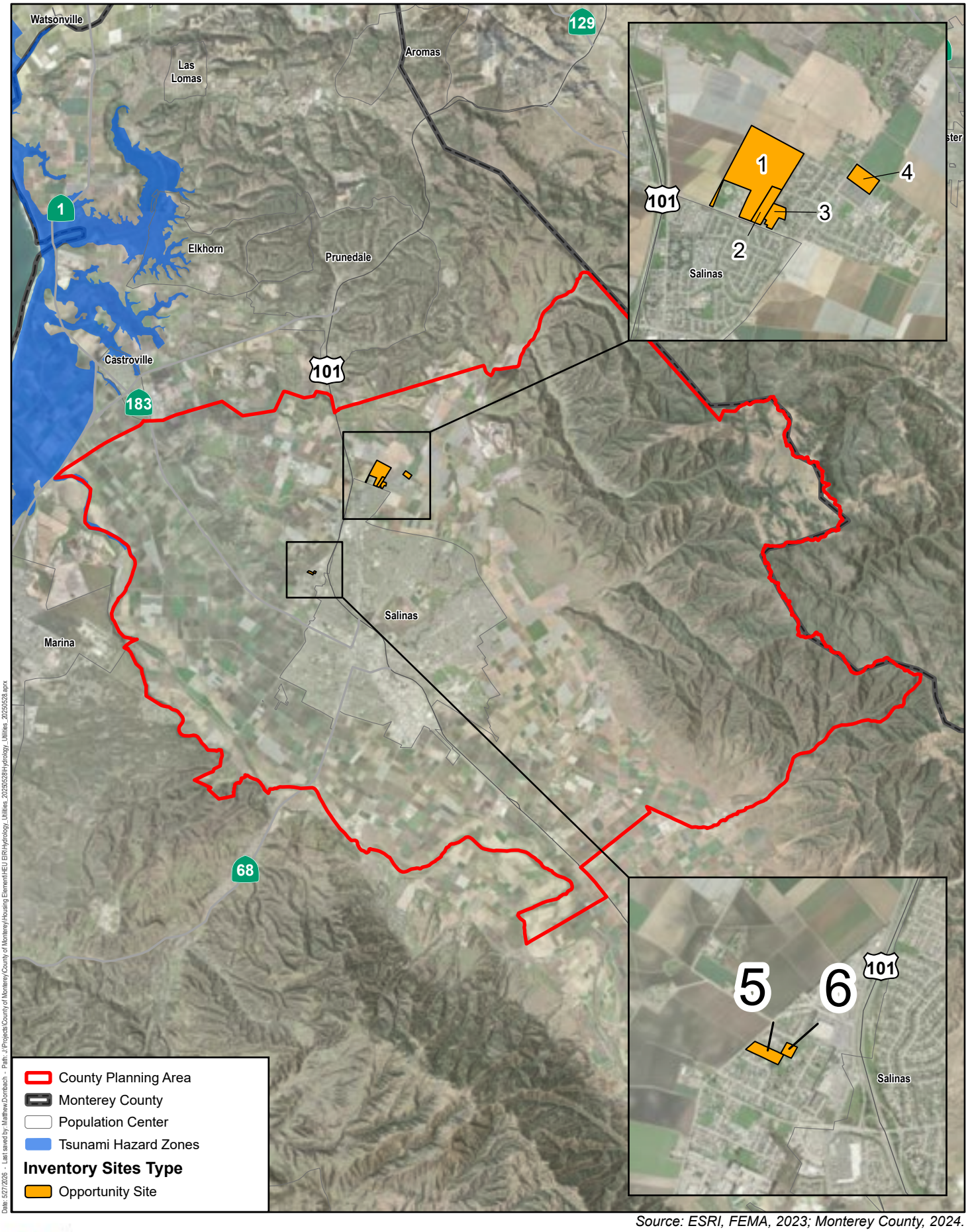
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**Figure 4.10-3e**

Tsunami Hazard Zones in Greater Monterey Peninsula Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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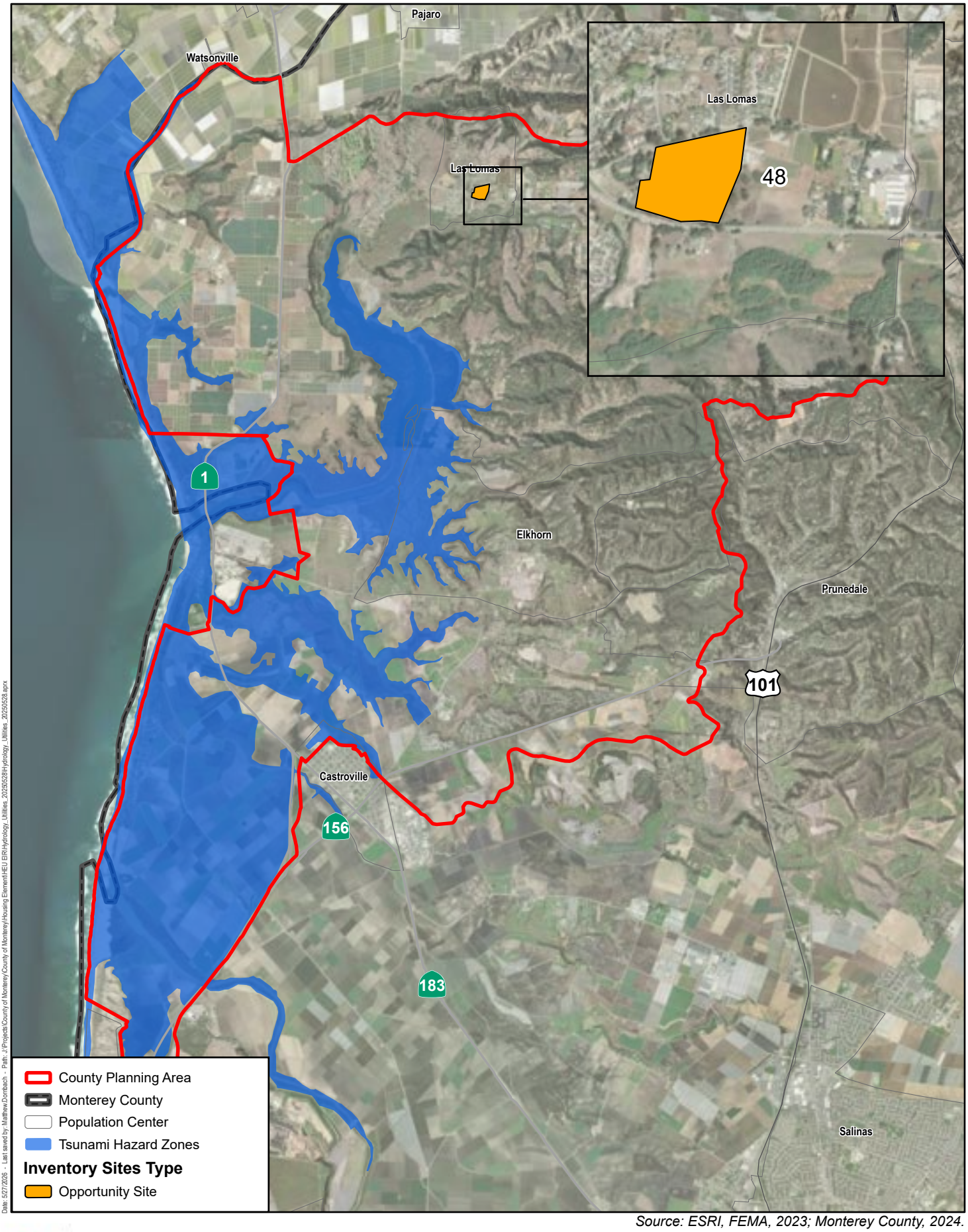
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**Figure 4.10-3f**

Tsunami Hazard Zones in Greater Salinas Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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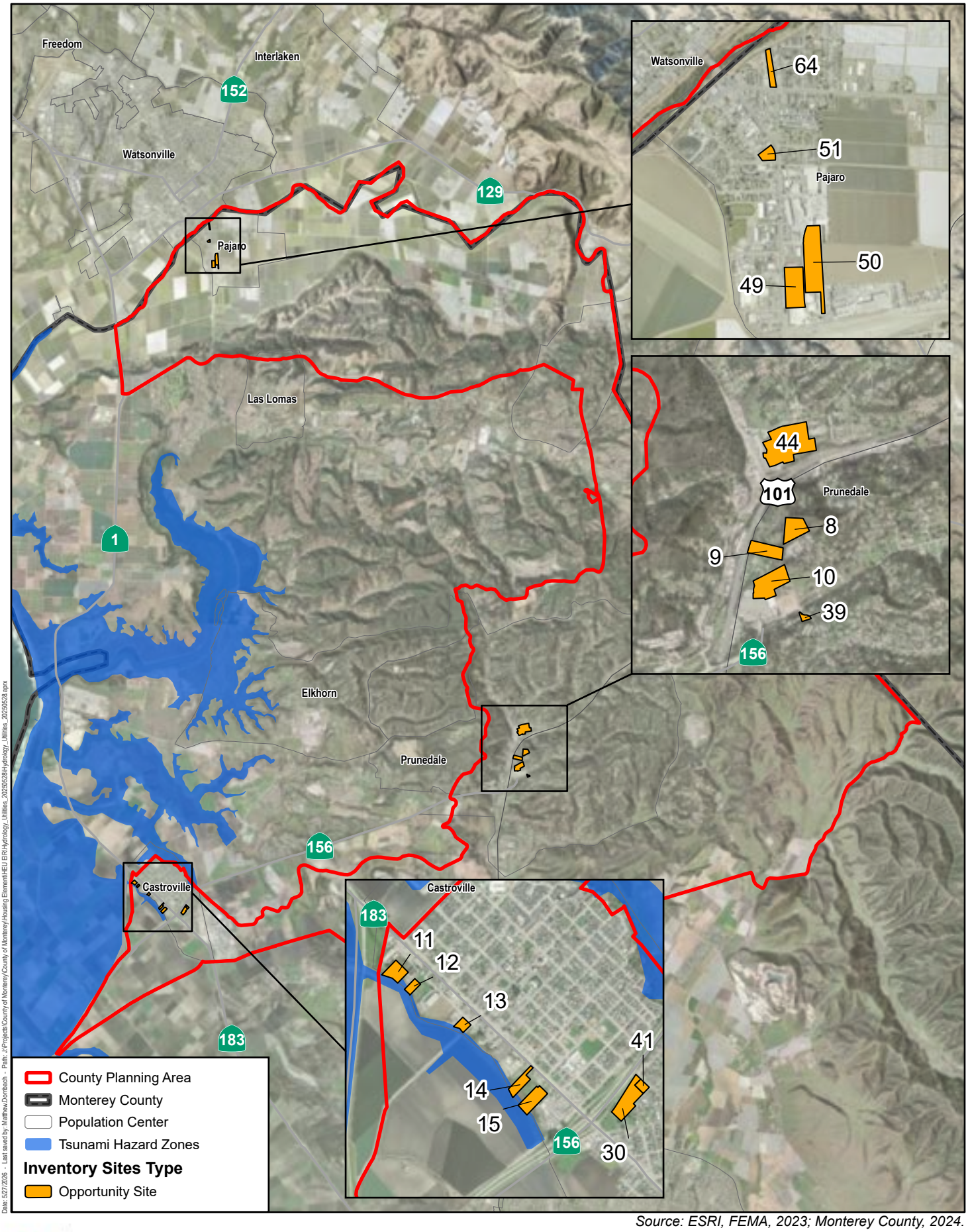
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**Figure 4.10-3g**

Tsunami Hazard Zones in North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

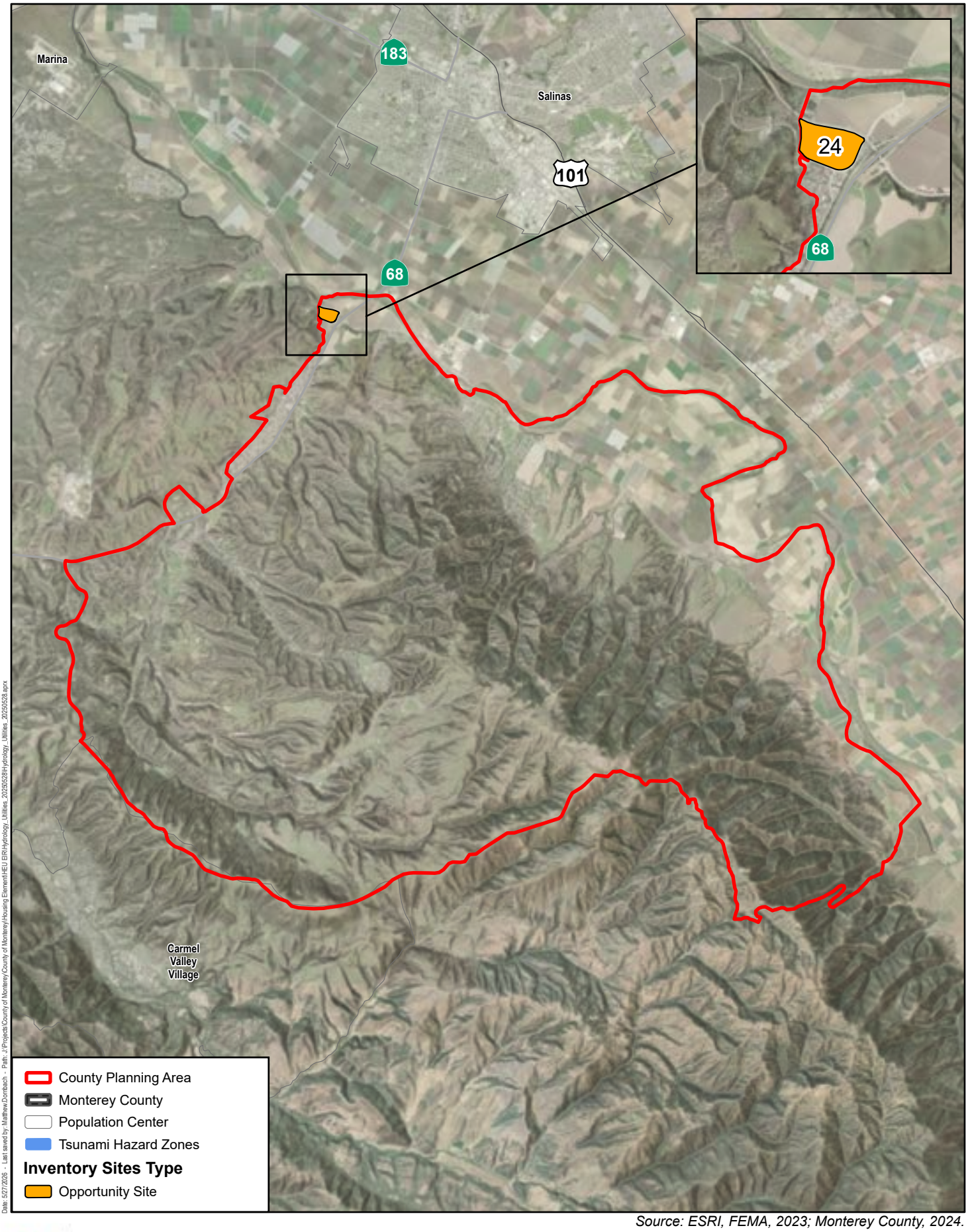
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**Figure 4.10-3h**

Tsunami Hazard Zones in North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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**Figure 4.10-3i**

Tsunami Hazard Zones in Toro Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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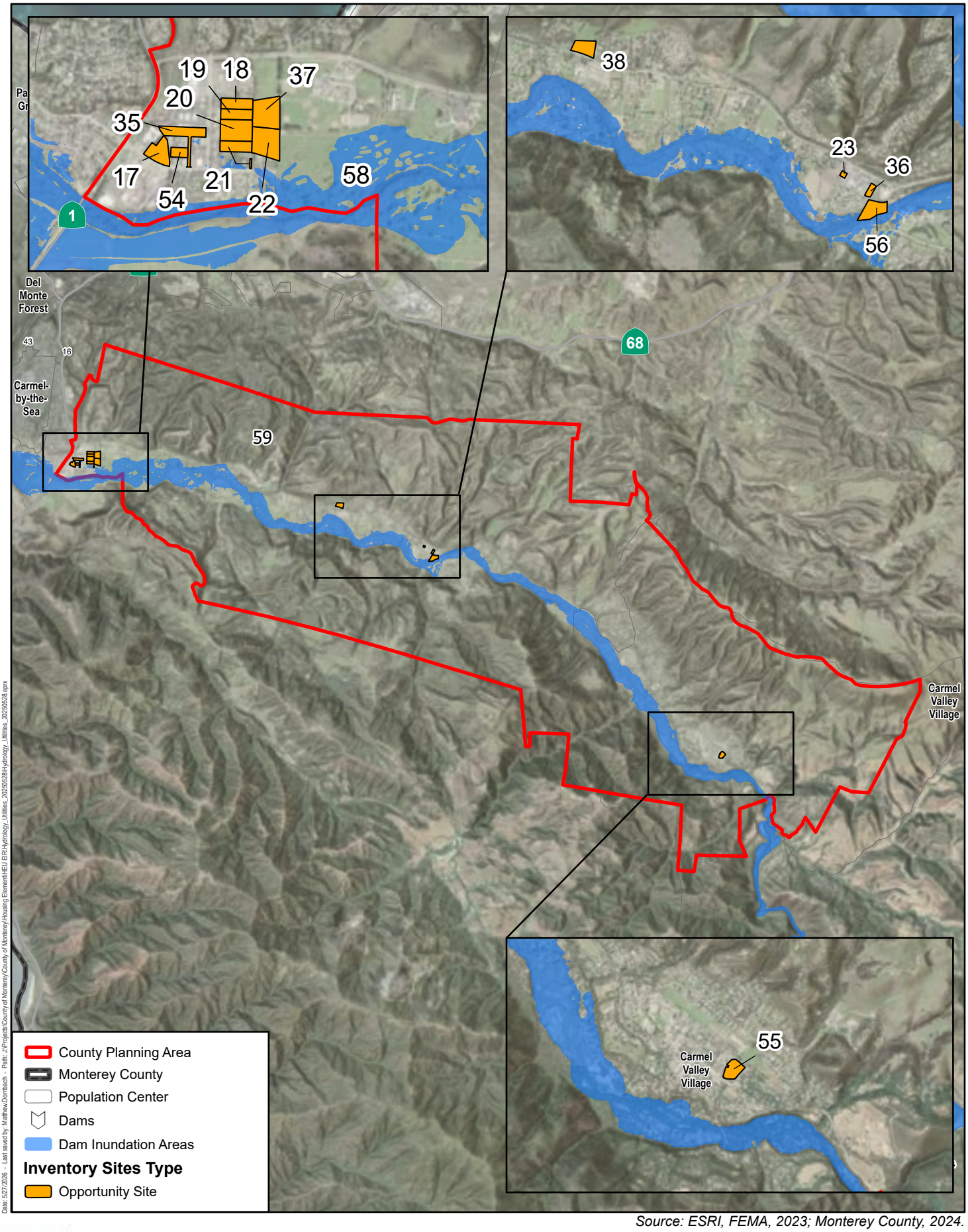
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**Figure 4.10-4a**

Jurisdictional Dam Inundation Zones in Carmel Area Land Use Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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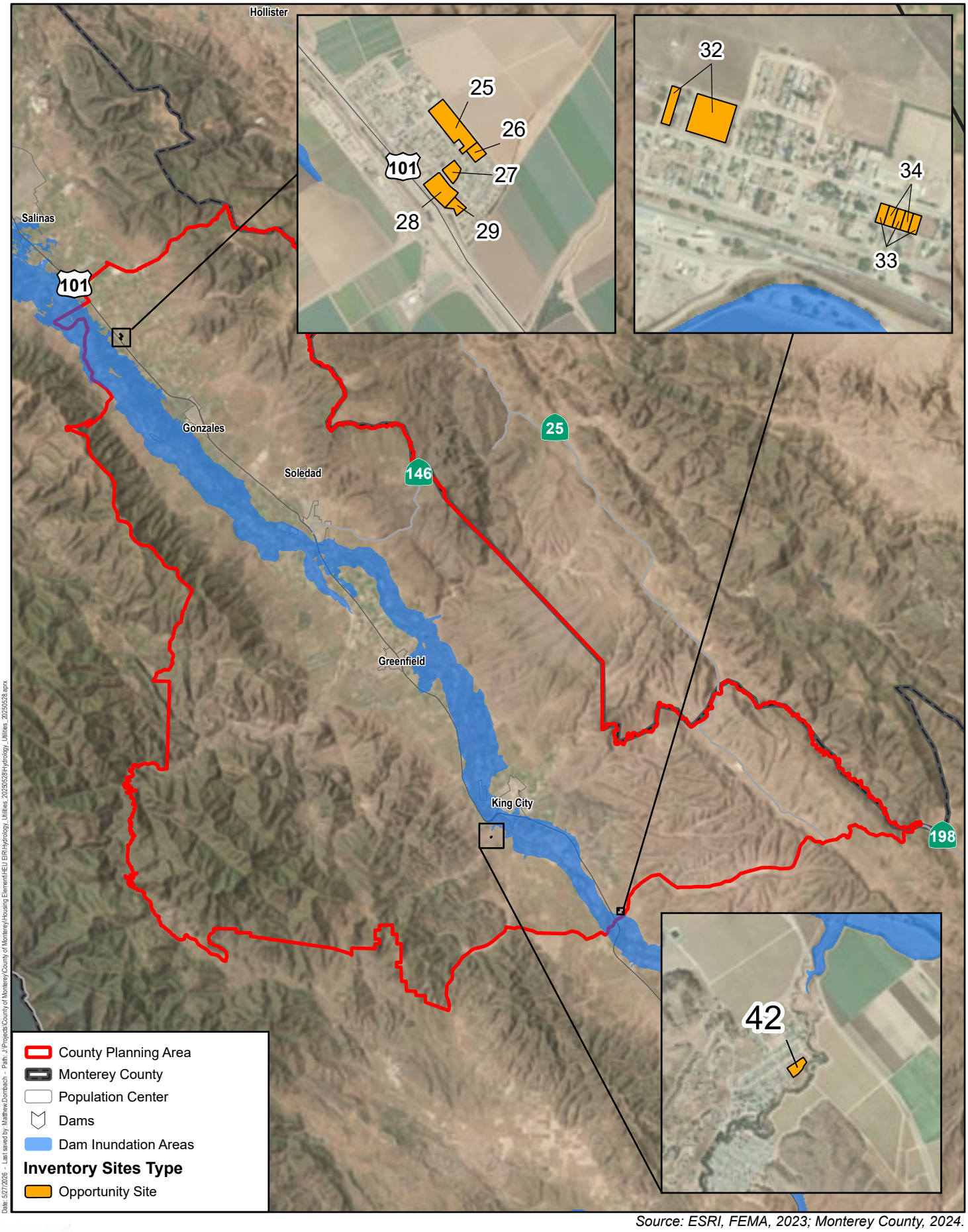
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**Figure 4.10-4b**

Jurisdictional Dam Inundation Zones in Carmel Valley Master Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

Harris & Associates

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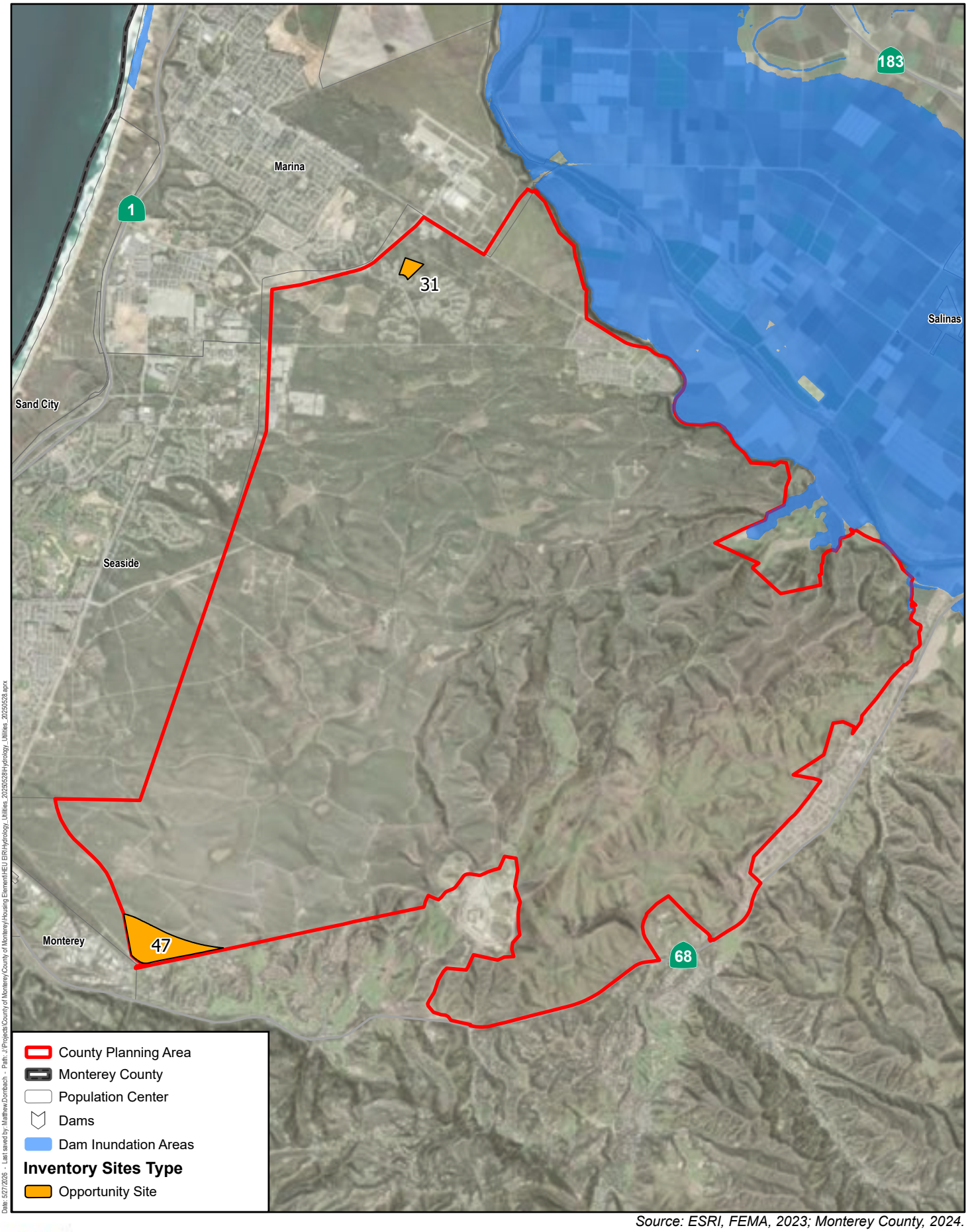
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**Figure 4.10-4c**

Jurisdictional Dam Inundation Zones in Central Salinas Valley Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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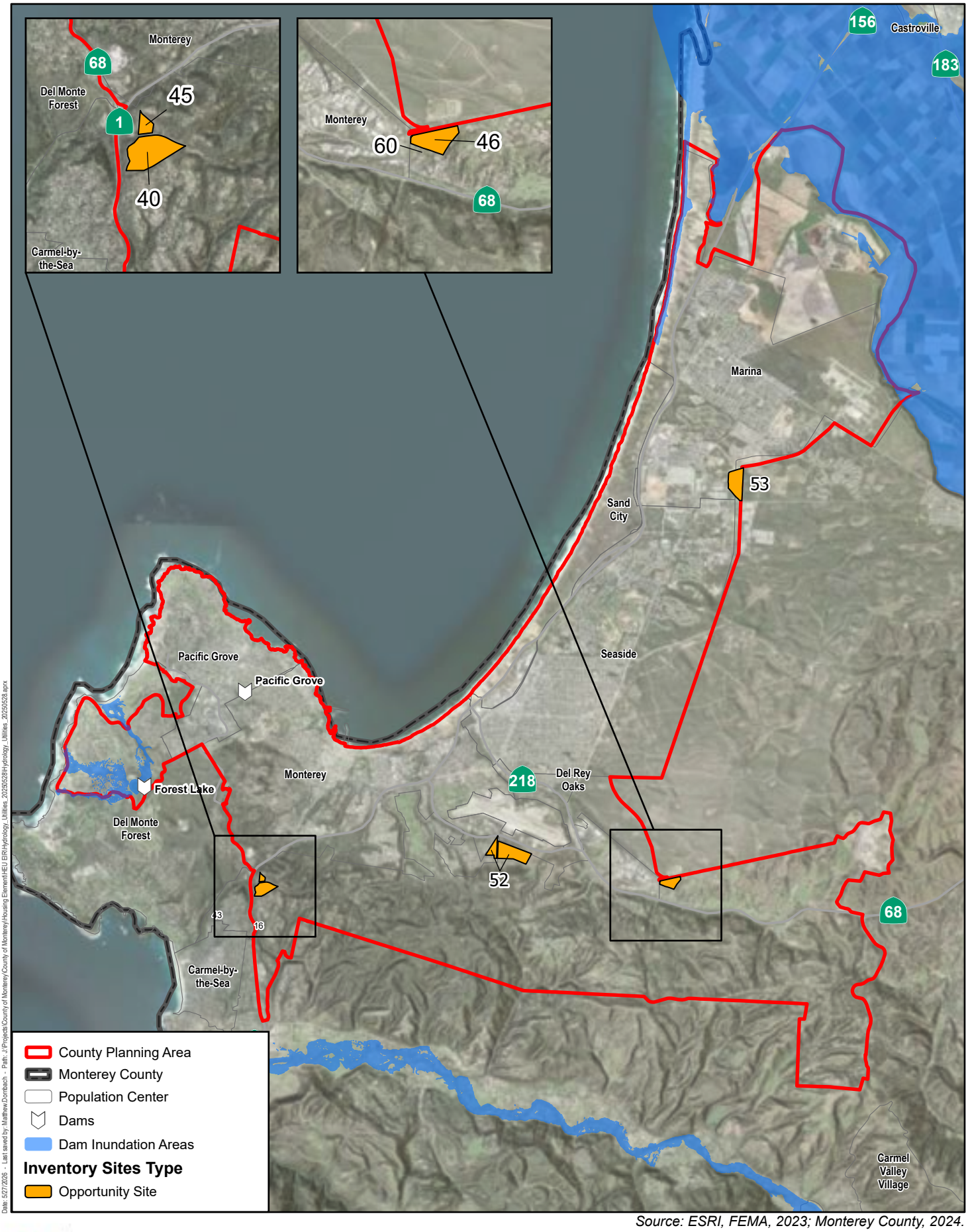
Harris & Associates

**Figure 4.10-4d**

Jurisdictional Dam Inundation Zones in Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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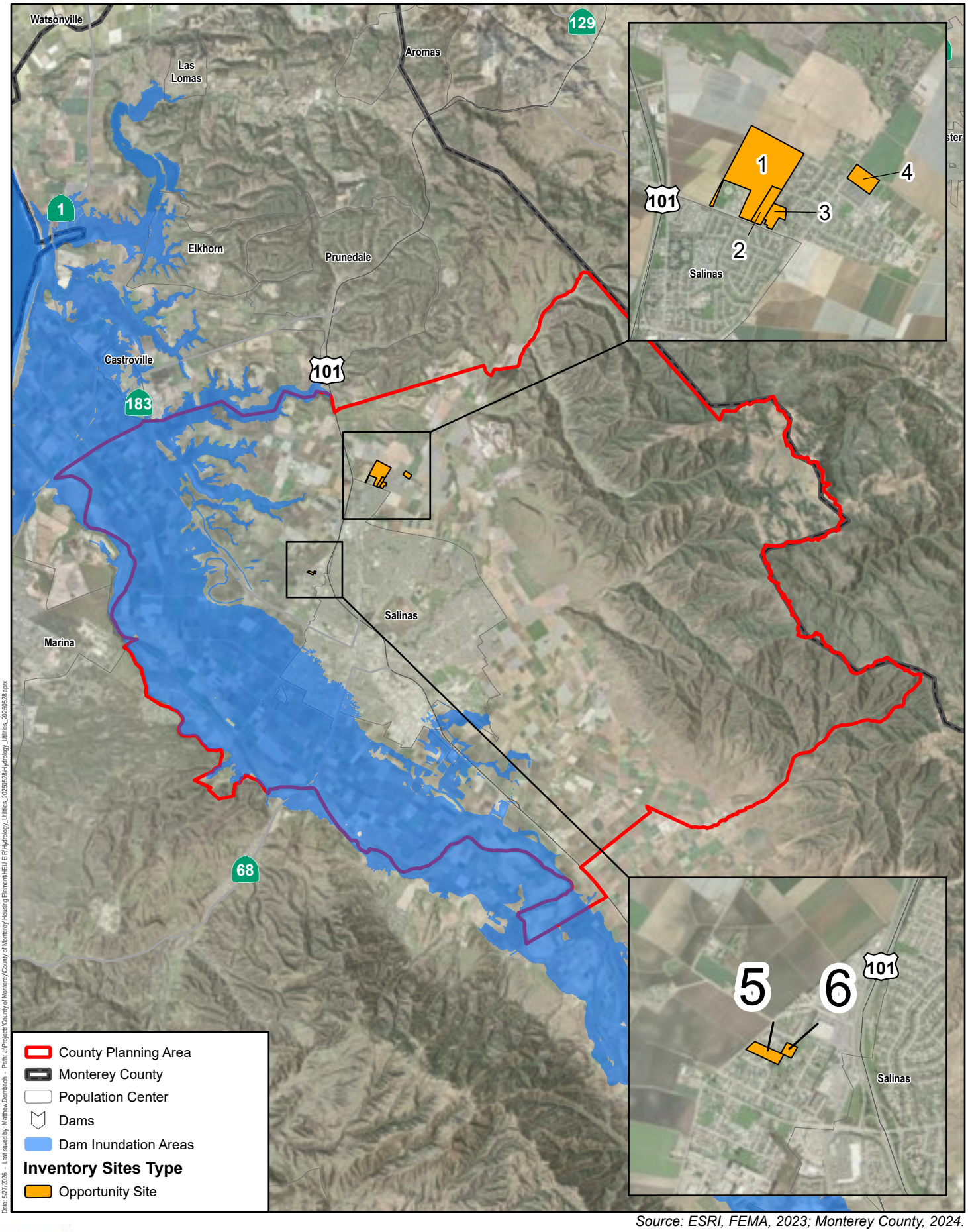
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**Figure 4.10-4e**

Jurisdictional Dam Inundation Zones in Greater Monterey Peninsula Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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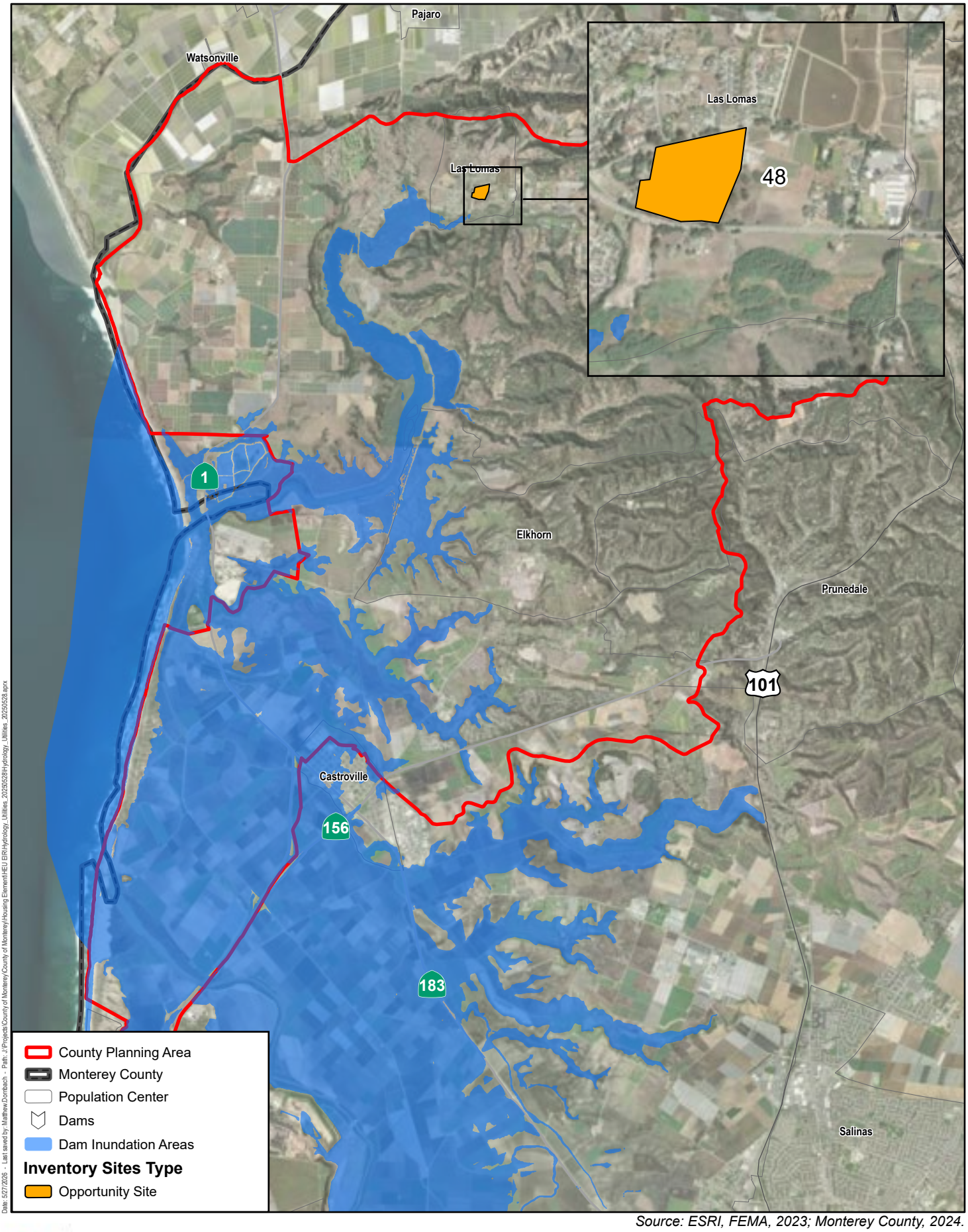
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**Figure 4.10-4f**

Jurisdictional Dam Inundation Zones in Greater Salinas Area Plan

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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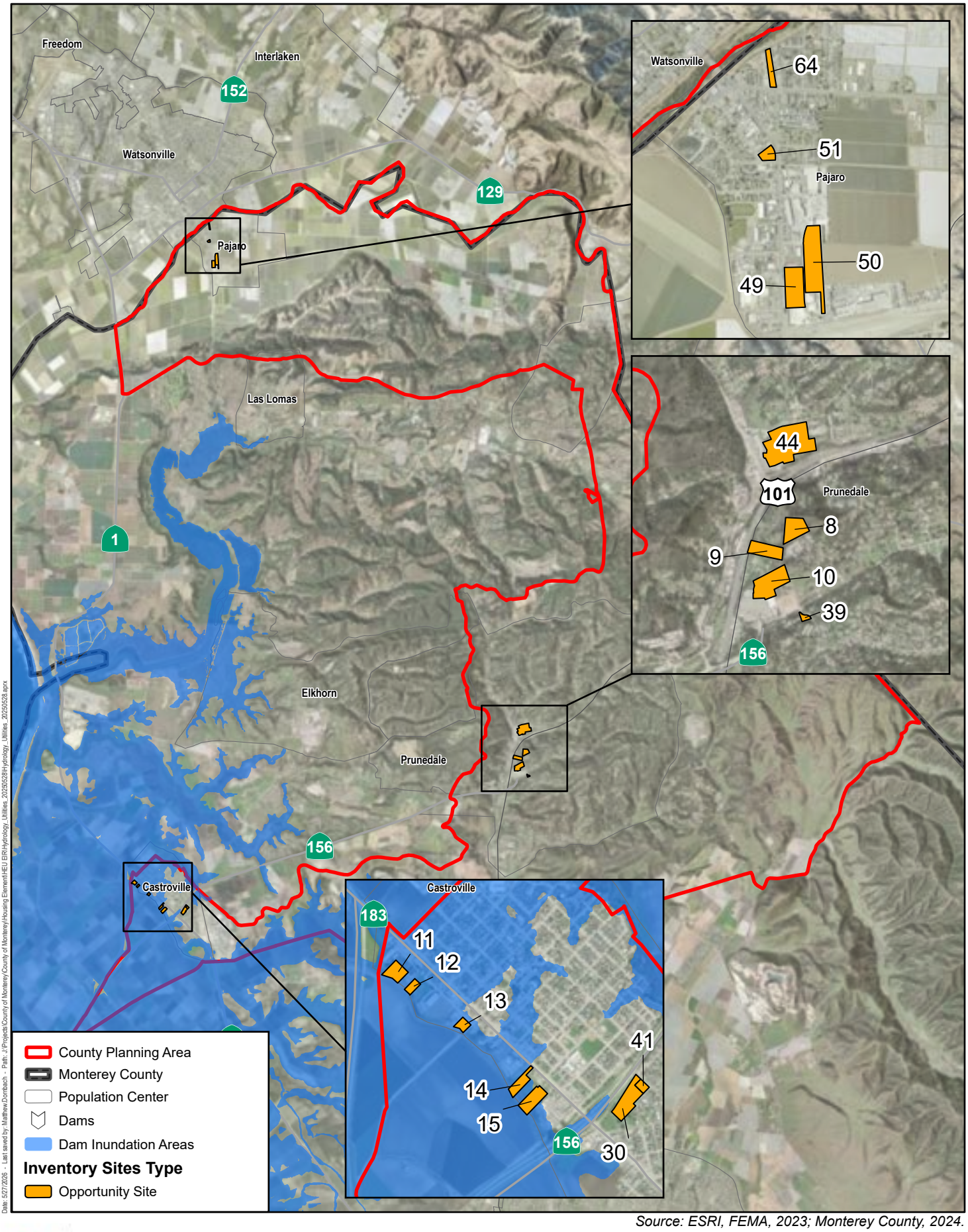
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Harris & Associates

**Figure 4.10-4g**

Jurisdictional Dam Inundation Zones in North County Land Use Plan (Coastal)

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*Source: ESRI, FEMA, 2023; Monterey County, 2024.*

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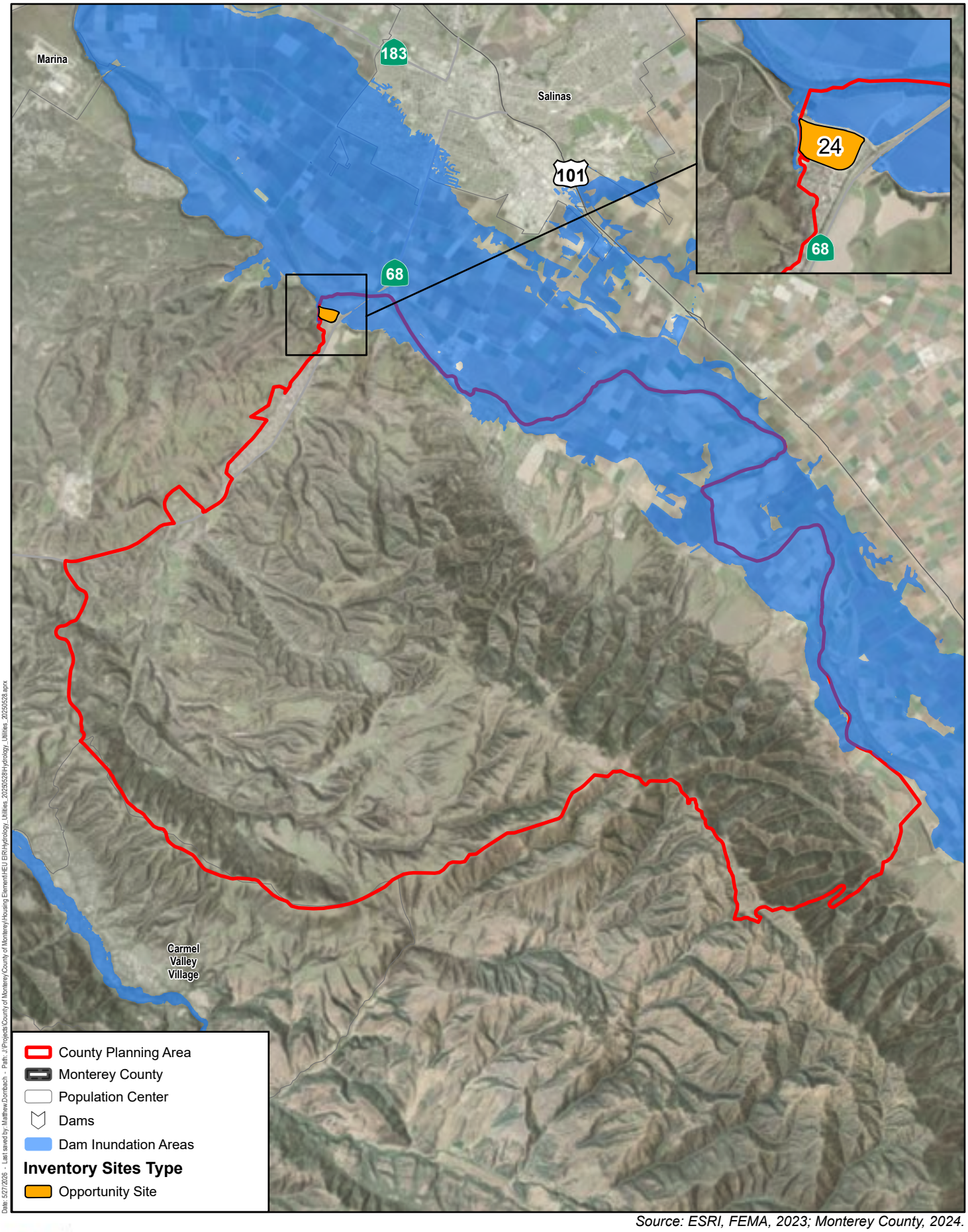
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**Figure 4.10-4h**

Jurisdictional Dam Inundation Zones in North County Area Plan (Inland)

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Source: ESRI, FEMA, 2023; Monterey County, 2024.

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**Figure 4.10-4i**

Jurisdictional Dam Inundation Zones in Toro Area Plan

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# 4.11 Land Use and Planning

This section evaluates the potential for impacts related to land use and planning resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description. This chapter of the Program Environmental Impact Report (PEIR) evaluates each of the opportunity site parcels to determine impacts on land use and planning.

For the purposes of the PEIR, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.11.1 Regulatory Setting

This section describes the state, regional, and local regulatory framework adopted to address land use and planning. There are no federal regulations related to land use and planning that apply to the proposed project.

### 4.11.1.1 State

#### California Government Code, Section 65300 (General Plans)

State planning law (California Government Code [CGC], Section 65300) requires every county in California to adopt a comprehensive, long-term General Plan for physical development of the county. A General Plan should consist of an integrated and internally consistent set of goals and policies that are grouped by topic into a set of elements and are guided by a countywide vision. State law requires that a General Plan address seven, mandatory elements or topics (land use, circulation, housing, conservation, open space, noise, and safety). The County must also prepare an environmental justice element, which is required for jurisdictions containing disadvantaged communities. Other topics such as economic development, community design/character, climate adaptation and resiliency, air quality, and healthy communities could be added as optional elements

to address specific local issues but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the county that a General Plan should address. The Governor's Office of Land Use and Climate Innovation is required by CGC Section 65040.2 to adopt and periodically revise the State General Plan Guidelines for the preparation and content of general plans for all cities and counties in California. The General Plan Guidelines serves as the "how to" resource for drafting a General Plan. The State General Plan Guidelines was last updated comprehensively in 2017.

### Senate Bill 375

Signed on September 30, 2008, Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans and funding priorities to help California meet the greenhouse gas reduction goals established in Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations, including Association of Monterey Bay Area Governments (AMBAG), to adopt a Sustainable Communities Strategy (SCS) or alternative planning strategy within their Regional Transportation Plan that will achieve greenhouse gas emissions reduction targets set by California Air Resources Board. There are two important facets to SB 375: reducing vehicle miles traveled and encouraging more compact, complete, and efficient communities for the future. SB 375 also includes provisions for exemptions from or streamlined California Environmental Quality Act (CEQA) review for projects classified as transit priority projects—projects that are consistent with SCS/Alternative Planning Strategy, at least 50 percent residential, minimum 20 dwelling units per acre, and within 0.5 mile of major transit stop or high-quality transit corridor (California Legislative Information 2026). AMBAG has adopted the 2045 Metropolitan Transportation Plan (MTP)/SCS in 2022, which guides land use and transportation planning for the region to reduce transportation-related greenhouse gas (GHG) emissions. SB 375 is a major land use and transportation planning law that modified various sections of CGC and PRC.

### Senate Bill 244

SB 244 was enacted in 2011 to address infrastructure and municipal service deficiencies in disadvantaged unincorporated communities (DUCs). SB 244 added CGC Section 65302.10, which requires counties to identify DUCs and analyze the extent to which those communities lack access to essential public services, including potable water, wastewater treatment, storm drainage, and structural fire protection. The law also requires consideration of financing mechanisms and planning strategies to improve infrastructure and service delivery to identified communities.

### 4.11.1.2 Regional

#### 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy

The AMBAG adopted the 2045 MTP/SCS on June 15, 2022. This comprehensive, long-range plan outlines the transportation vision for Monterey, Santa Cruz, and San Benito Counties through the year 2045. It serves as a blueprint for aligning transportation investments with regional growth, housing, and sustainability goals, in compliance with federal and state mandates, including SB 375. It established a comprehensive set of policy goals to guide the region's transportation planning and land use decisions through 2045. The 2045 MTP/SCS adopted the following goals and policy objectives:

- **Access and Mobility –** Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region.
- **Economic Vitality –** Raise the region's standard of living by enhancing the performance of the transportation system.
- **Environment –** Promote environmental sustainability and protect the natural environment.
- **Healthy Communities –** Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation.
- **Social Equity –** Provide an equitable level of transportation services to all segments of the population.
- **System Preservation and Safety –** Preserve and ensure a sustainable and safe regional transportation system.

These goals collectively aim to create a balanced and sustainable transportation system that meets the diverse needs of the Monterey Bay region's residents and supports long-term regional development objectives.

#### Airport Land Use Compatibility Plans

According to the California Department of Transportation (Caltrans), an Airport Land Use Compatibility Plan (ALUCP) guides the "orderly growth of an airport and the area surrounding the airport within the jurisdiction of the Airport Land Use Commission (ALUC), excluding existing land uses. Its primary function is to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general." ALUCPs provide land use compatibility policies and ensure that vacant lands in the vicinity of airports are planned and zoned for uses compatible with airport operations. In addition to the identification of land use compatibility issues, an ALUCP identifies notification/disclosure areas around each airport. Land uses within airport planning areas are required to conform to safety, height, and noise restrictions. Future development potential on unincorporated lands in proximity to several airports could be subject

such requirements. Pursuant to California Public Utilities Code, Section 21676, local governments are required to submit all General Plan and zoning amendments that occur in the airport land use compatibility planning areas for consistency review by the appropriate ALUC. There are four public-use airports/airfields within the boundaries of the Monterey County ALUC's jurisdiction.

- ALUCP for the Monterey Regional Airport
- ALUCP for the Marina Municipal Airport
- Mesa Del Rey Airport Master Plan
- Salinas Municipal Airport Land Use Plan

### Airport Land Use Compatibility Plan for the Monterey Regional Airport

The Monterey Regional Airport is owned and operated by the Monterey Peninsula Airport District, governed by five publicly elected members to form a Board of Directors. Cities within the Airport District include Monterey, Pacific Grove, Carmel-by-the-Sea, Del Rey Oaks, Seaside and Sand City, and portions of UMC. The ALUCP for Monterey Regional Airport, adopted by the Monterey County ALUC on February 25, 2019 (2019 ALUCP), serves as a strategic framework to ensure that land uses surrounding the airport are compatible with aviation operations. Its primary objectives are to protect public health, safety, and welfare by minimizing noise and safety hazards for communities near the airport, while supporting the airport's continued operation and growth.

Key components of the Monterey Regional Airport ALUCP are as follows:

- **Safety Zones:** The plan delineates specific safety zones around the airport, each with tailored land use restrictions to minimize risks associated with aircraft operations.
- **Noise Compatibility:** It establishes noise impact zones based on aircraft noise contours, guiding land use decisions to prevent noise-sensitive developments in high-noise areas.
- Airspace Protection: The ALUCP includes measures to prevent obstructions in navigable airspace, ensuring safe aircraft operations by regulating the height of structures and vegetation near the airport.
- **Overflight Notification:** The plan identifies areas where frequent aircraft overflights occur, recommending that property buyers and occupants be informed about potential aircraft noise and overflight activity.

The ALUCP is integral to local planning processes, requiring that city and county General Plans, Zoning Ordinances, and development proposals within the airport's influence area be reviewed for consistency with the plan's policies. This ensures coordinated land use planning that aligns with aviation safety and operational needs.

The ALUC for the Monterey Regional Airport has not reviewed the Monterey County General Plan (2010 General Plan) for consistency with the 2019 ALUCP. Therefore, individual projects currently go to the ALUC for review and a determination of consistency. Prior to the amendment

of a General Plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the ALUCP, the County must first refer the proposed action to the ALUC for review and a determination of consistency. If the ALUC determines that the proposed action is inconsistent, the County may, after a public hearing, propose to overrule the ALUC's decision by a two-thirds majority vote, pursuant to Public Utilities Code, Section 21676(b), supported by specific findings that the action is consistent with the purposes stated in Public Utilities Code, Section 21670, which is to minimizes the public's exposure to excessive noise and safety hazards.

Opportunity Sites 46, 47, and 52 are within Zone 7 (Airport Influence Area [AIA]) of the Monterey Regional Airport. A portion of Opportunity Site 46 is also located in Zone 4 (Outer Approach and Departure Zone [OADZ]).

#### Airport Land Use Compatibility Plan for the Marina Municipal Airport

The Monterey County ALUC adopted the Marina Municipal ALUCP to guide land use planning in the vicinity of the Marina Municipal Airport and minimize potential conflicts between airport operations and surrounding development. The ALUCP establishes compatibility policies related to aircraft noise, safety hazards, airspace protection, and overflight activity. The plan includes compatibility zones surrounding the airport that identify acceptable land uses and development intensities based on factors such as noise exposure, accident potential, and height restrictions.

The Marina Municipal ALUCP is intended to ensure that new development within the AIA does not create hazards to aircraft operations or expose people to excessive aircraft noise or safety risks. Local jurisdictions are required to review proposed land use actions for consistency with the Marina Municipal ALUCP pursuant to California Public Utilities Code, Section 21670 et seq. Development projects located within the AIA may be subject to additional review by the ALUC to evaluate consistency with applicable compatibility policies and height notification requirements established under Federal Aviation Administration regulations.

Opportunity Sites 31 and 53 are within the AIA of the Marina Municipal Airport.

### 4.11.1.3 Local

#### 2010 General Plan (Inland)

The 2010 General Plan, adopted on October 26, 2010, are comprised mainly of the following nine chapters—eight General Plan elements and ten Area and Master Plans. The 2010 General Plan consists of policies that apply countywide and policies unique to a specific region (area and master plan areas). The Land Use Maps and land use designation descriptions in the 2010 General Plan cover all inland, unincorporated, areas of Monterey County. Due to the diversity of UMC, geographically smaller plans were created to provide more specific policies unique to particular geographical areas.

The inland portion of UMC is divided into seven Area Plans (Cachagua, Central Salinas Valley, Greater Monterey Peninsula including the non-coastal portion of the Del Monte Forest, Greater Salinas, North County, South County, and Toro). Additionally, there are two Master Plans, the Carmel Valley Master Plan (CVMP) and the Fort Ord Master Plan. These Area Plans and Master Plans are identified as Chapter 9.A through 9.I in the 2010 General Plan. Additionally, the General Plan includes Chapter 9.J, Agricultural and Winery Corridor Plan. The Agricultural and Winery Corridor Plan implements 2010 General Plan policies that extends across three Area Plans, Central Salinas Valley, Toro, and South County. The following lists the chapters of the 2010 General Plan:

- **Chapter 1 – Land Use Element:** State Planning and Zoning Law (CGC Section 65302[a]) establishes the requirements for the Land Use Element of the General Plan. The Land Use Element guides decision-makers, planners and the general public as to the ultimate pattern of development within UMC. It designates the general distribution, location and extent of land uses, such as housing, business, industry, open space, agriculture, natural resources, recreation, and public/quasi-public uses. The Land Use Element also discusses the standards of residential density and non-residential intensity for the various land use designations. The Land Use Element governs how land is to be used. Many of the issues and policies contained in other plan elements are linked in some degree to this element.
- **Chapter 2 – Circulation Element:** This element identifies the general location and extent of existing and proposed major transportation facilities for vehicle, rail, air, water, and bicycle transportation including goals relative to: major roadways; movement of people and goods; scenic highways; and public transit.
- **Chapter 3 – Conservation and Open Space Element:** This element guides the County in the long-term conservation and preservation of open space lands and natural resources while protecting private property rights. The County's intent is not to alter existing regional, state or federal laws and regulations, but rather to enable greater cooperation among public agencies and the public to share management responsibilities in accomplishing the shared goal of conserving and protecting the resources of the region. It also addresses scenic resources, cultural and historic resources, and energy and mineral resources.
- **Chapter 4 – Safety Element:** This Safety Element combines the state-mandated safety and noise elements. This Element establishes policies and programs to protect the public from risks associated with seismic, geologic, flood, and wildfire hazards. This Element also identifies sources of noise and provides policies addressing existing and foreseeable noise problems. This element is currently being updated by the County as a separate project.
- **Chapter 5 – Public Services Element:** This element addresses critical infrastructure and service issues, including water supply and conservation, water quality, parks,

wastewater collection and disposal, solid waste management, and key social services such as schools, libraries and medical care.

- **Chapter 6 – Agriculture Element:** Agriculture consisting of crop farming and livestock grazing is the largest industry in the UMC and contributes a significant amount of money to Monterey County's economy. Agriculture Element establishes policies directed at enhancing and supporting long-term productivity and commercial viability of the County's agricultural industry.
- **Chapter 7 – Economic Development Element:** Monterey County's economy is based on its two most important and unique natural resources: (1) the fertile Salinas River Valley, and (2) the Monterey Bay and Pacific coastline. Goals and policies in this Economic Development Element are designed to promote economic development in key industries to create jobs and business opportunities, maintain the existing workforce, and improve the business climate in Monterey County.
- **Chapter 8 – Housing Element Fifth Cycle (2015–2023):** Housing Elements are mandated by state law to be updated approximately every 8 years. The Fifth Cycle Housing Element Update was adopted in 2016. The project analyzed in this PEIR is the Sixth Cycle Update.
- **Chapter 9 – Area and Master Plans:**
  - Chapter 9.A – Cachagua Area Plan
  - Chapter 9.B – Carmel Valley Master Plan
  - Chapter 9.C – Central Salinas Valley Area Plan
  - Chapter 9.D – Greater Monterey Peninsula Area Plan
  - Chapter 9.E – Fort Ord Master Plan
  - Chapter 9.F – Greater Salinas Area Plan
  - Chapter 9.G – North County Area Plan (Inland)
  - Chapter 9.H – South County Area Plan
  - Chapter 9.I – Toro Area Plan
  - Chapter 9.J – Agricultural and Winery Corridor Plan

## Community Areas

The following seven Community Areas are identified in the 2010 General Plan to direct growth and development in a manner that enhances the quality of life in the respective communities. The plans describe existing and future development in each community:

- Fort Ord Community Area
- Chualar Community Area
- Boronda Community Area
- Castroville Community Area
- Pajaro Community Area

### Rural Centers

The 2010 General Plan identifies the following Rural Centers: San Lucas, Pine Canyon (King City), Bradley, Lockwood, Pleyto, River Road, and San Ardo.

### Affordable Housing Overlay Areas

The Affordable Housing Overlay (AHO) program was established to encourage the development of affordable and workforce housing projects. The 2010 General Plan identifies the following AHO areas, as designated on their respective maps: Mid-Carmel Valley AHO (Figure AHO-1 of the 2010 General Plan Land Use Element), Monterey Airport and Vicinity AHO (Figure AHO-2 of the 2010 General Plan Land Use Element), and Highway 68/Reservation Road AHO (Figure AHO-3 of the 2010 General Plan Land Use Element) as designated in the respective maps. The AHO program also applies to Community Areas prior to the adoption of a Community Plan, and to Rural Centers prior to the adoption of a Capital Improvement and Financing Plan.

### 1982 General Plan (Coastal)

The 1982 General Plan, developed with an 18-member Citizens Advisory Committee, prioritized maintaining Monterey County's rural character, economic base, and natural resources. The 1982 General Plan laid the groundwork for the UMC Local Coastal Program (LCP) and Land Use Plans (LUPs). Since the 2010 General Plan focuses on inland areas of the UMC, the 1982 General Plan remains the appropriate General Plan to guide development in Monterey County's coastal unincorporated areas.

### Monterey County Local Coastal Program – Land Use Plans

The Coastal Act requires local governments to prepare LCPs consistent with the Coastal Act (California Public Resources Code [PRC], Section 30000 et seq.) for the portion of the statewide Coastal Zone located within their jurisdiction.

A portion of Monterey County is designated as a "coastal zone." The Coastal Zone of the County is divided into four areas governed by LUPs and Coastal Implementation Plan (CIP), which together comprise the LCP for Monterey County.

The four LUPs include the following:

- North County Land Use Plan (Coastal)
- Big Sur Coast Area Land Use Plan
- Carmel Area Land Use Plan
- Del Monte Forest Land Use Plan

The County is the main authority for issuing most coastal development permits in Monterey County's coastal areas, with the California Coastal Commission retaining jurisdiction over specific areas, such as tidelands, public trust lands, and state parks. Additionally, the California Coastal

Commission holds appellate authority over certain categories of development, ensuring compliance with broader coastal policies.

The CIP establishes various development regulations, standards, and procedures to implement the policies of the LUPs. The CIP is published in six parts:

- **Part 1:** Coastal Zone Regulations (Chapters 20.105 – 20.139); Regulations for Coastal Development Permits (Chapter 20.140); General Provisions and Exceptions in the Coastal Zone (Chapter 20.142); and Title 20 (Zoning Ordinance)
- **Part 2:** Regulations for Development in the North County Land Use Plan Area (Chapter 20.144)
- **Part 3:** Regulations for Development in the Big Sur Coast Land Use Plan Area (Chapter 20.145)
- **Part 4:** Regulations for Development in the Carmel Area Land Use Plan Area (Chapter 20.146)
- **Part 5:** Regulations for Development in the Del Monte Forest Land Use Plan Area (Chapter 20.147)
- **Part 6:** Appendices Applicable County Ordinances

Additionally, County ordinances applicable in the Monterey County Coastal Zone are: Title 15 Public Services (Chapters 15.04, Small Water Systems; 15.08, Water Wells; and 15.20, Sewage Disposal); Title 16 Environment (Chapters 16.04, Surface Mining and Reclamation; 16.08, Grading; 16.12, Erosion Control; and 16.16, Regulation for Flood Plains in Monterey County of Monterey); Title 18, Buildings and Construction; Title 19, Subdivisions; and Title 20, Coastal Zoning.

### Local Agency Formation Commission of Monterey County

In California, Local Agency Formation Commission (LAFCO) actions are governed by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. A LAFCO is a regulatory agency with county-wide jurisdiction established by state law to encourage the orderly formation of local governmental agencies, preserve agricultural land resources, discourage urban sprawl, and encourage the efficient delivery of local government services (CGC Sections 56001 and 56301). The LAFCO of Monterey County was established in 1963 and is an independent regulatory agency with quasi-legislative authority. LAFCO is responsible for regulating the boundaries of cities and special districts, establishing spheres of influence, and conducting studies of local government services. The Commission coordinates logical and timely changes to local government boundaries including annexations and detachments of territory, incorporation of cities, formation of special districts, and consolidation, merger, and dissolution of special districts. LAFCO is also charged with reviewing and approving ways to reorganize, simplify, and streamline governmental organizations.

## Growth Management Policy

The following Growth Management Policy was adopted by the Board of Supervisors in October 1979:

> Managed growth must be incorporated into the General Plan of the County. In so doing, the General Plan must be written to include appropriate growth areas within the County. These areas must recognize the diversity among the lands of the County and provide for the planning of each area in a way that utilizes its unique characteristics. The policies for each planning areas to be defined within the General Plan must countenance differences between the planning areas in terms of natural resources, physical and environmental attributes, economic development, and sociocultural development. Furthermore, growth areas shall be designated only where there is provision for an adequate level of services and facilities such as water, sewer, fire protection, and drainage, and be coordinated with school authorities.

The Growth Management Policy establishes a land use policy within UMC to preserve vast areas of agricultural lands and natural open space and to establish areas of suburban developments and a number of more urban unincorporated communities.

The Growth Management Policy states that growth must be managed in UMC and identifies appropriate growth areas. Growth areas are to be designated where provision for adequate coordination with school authorities can be achieved. The Growth Management Policy also states that urban development should be discouraged in areas lying outside the boundaries of urban service areas and limits premature and unnecessary conversion of open space outside the urban service areas. New areas of development concentration are to be encouraged if they can be shown to achieve other aspects of growth management, such as preservation of prime agricultural lands or the protection of other natural resources. New areas of development concentration are to provide urban services such as water, sewage treatment, roads, commercial facilities, schools, and fire protection. The 2010 General Plan provided more focused and designated areas for future growth, with priority growth areas designated as "Community Areas" with "Rural Centers" identified for secondary planning priorities for growth (LU-2.20, LU-2.29). The HEU6 focused site selection strategies to reflect the growth priorities identified in the 2010 General Plan in addition to meeting the requirements of State Housing Law as it relates to affirmatively furthering fair housing and increasing access to housing opportunities.

## Monterey County Code – Inland and Coastal

### *Zoning Ordinances*

The County of Monterey Zoning Ordinances regulate land use and development within the unincorporated areas of the County. These ordinances implement the policies of the County General Plan by establishing zoning districts, specifying allowable land uses, and setting standards

for building heights, setbacks, density, signage, and other development characteristics. The Zoning Ordinances are designed to protect public health, safety, and welfare, preserve environmental and agricultural resources, and guide orderly growth. The County's inland areas are governed by Title 21, Zoning, and the coastal areas are governed by Title 20, Coastal Zoning.

## 4.11.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to land use and planning.

Monterey County is one of the largest counties in the State of California, covering over 3,300 square miles comprising a variety of natural habitats and residential communities. Monterey County is on the north-central coast of California bordered by Santa Cruz County to the north; San Benito, Fresno, and King Counties to the east; San Luis Obispo County to the south; and the Pacific Ocean to the west.

The UMC encompasses a diverse and expansive landscape that includes agricultural lands, coastal bluffs, inland valleys, mountain ranges, rural communities, and protected natural areas, encompassing approximately 85 percent of the Monterey County's geographic area. There are 12 incorporated cities in Monterey County making up approximately 75 percent of the Monterey County's population and roughly 15 percent of the total land area. These cities are generally classified as either valley or peninsula. There are five valley cities consisting of Gonzales, Greenfield, King City, Salinas (Monterey County seat), and Soledad and seven peninsula cities consisting of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, and Seaside.

The UMC is largely divided into seven subareas: North County, Greater Salinas, Central Salinas Valley, Greater Monterey Peninsula, Toro, Cachagua, and South County. Additionally, two Master Plans have been adopted within the Greater Monterey Peninsula Area Plan, the CVMP and the Fort Ord Master Plan. The County's LCP consists of four planning areas: North County—Coastal, Del Monte Forest, Carmel Area, and Big Sur Coast. Most of this development is concentrated in the northern one-third of the County.

## 4.11.3 Method of Analysis

This analysis evaluates potential conflicts between the HEU6 and applicable regional and local LUPs, pursuant to CEQA Guidelines, Section 15125(d). The focus is on determining whether any identified inconsistencies would result in a significant environmental effect.

In accordance with established CEQA practice and case law, consistency is defined as meeting the general intent of a plan's goals and policies. The HEU6 need not be in perfect conformity with every individual policy, as general plans must balance competing interests. Consequently, a

conflict with a specific policy does not automatically constitute a significant environmental impact unless it results in a direct physical effect on the environment.

The analysis emphasizes policies adopted for the purpose of avoiding or mitigating environmental effects. Furthermore, the County's consistency determination may consider the policy implications of project denial, which could result in alternative inconsistencies (e.g., failure to meet regional housing needs).

## 4.11.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on land use and planning if it would:

- **Threshold 1:** Physically divide an established community.
- **Threshold 2:** Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

## 4.11.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to land use and planning that could result from implementation of the project.

### 4.11.5.1 Threshold 1: Physical Division of Established Community

**Threshold 1:** Would the project physically divide an established community?

#### Impact Analysis

The HEU6 would facilitate future residential development at higher densities, including HDR/25 (High Density Residential, 25 dwelling units per acre) and HDR/30 (High Density Residential, 30 dwelling units per acre), on identified opportunity sites throughout the UMC and one site in the City of Marina. Existing conditions on the opportunity sites vary: 20 sites are currently vacant, seven sites are in agricultural use, five sites consist of underutilized portions of church or school properties without above-grade structures, 10 sites are developed with commercial or industrial uses, and 14 sites contain existing residential uses or vacant portions of residential properties. Existing uses, zoning designations, and land use information are provided in Table 2-1 in Chapter 2 of this PEIR.

The opportunity sites were selected through a comprehensive screening process intended to identify locations where additional residential capacity could be accommodated in a manner consistent with existing development patterns, available infrastructure, and long-term planning objectives. Site selection criteria for the HEU6 included, but were not limited to, proximity to existing infrastructure and public services, access to transit and community amenities,

environmental constraints, compatibility with surrounding uses, infill development potential, and property owner interest. The County prioritized sites within or adjacent to Community Areas, Rural Centers, and Housing Overlay districts, consistent with applicable General Plan policies (e.g., Policies LU-1.18, LU-1.19, LU-2.3, LU-2.4, and LU-2.26) to support orderly growth, encourage infill development, and minimize the potential for scattered development patterns.

Implementation of the HEU6 would not physically divide an established community because the proposed zoning changes would not require construction of physical features that could separate or disrupt existing neighborhoods or community connectivity. As shown on Figures 2-2a through 2-2i, opportunity sites are scattered in different Community Areas of the UMC and would not divide an established community. The HEU6 does not propose new freeways, major roadway expansions, rail lines, gated infrastructure, or other physical barriers that could physically bisect established communities. Rather, future development facilitated by the HEU6 would occur on sites already served by the existing roadway network and development of the opportunity sites would generally occur through infill or redevelopment within existing developed areas or areas surrounded by or planned for similar uses. Development of individual opportunity sites could contain internal roads and driveways to housing development, however, these internal circulation system are subject to individual review by the County at the time a development application is filed and be required to comply with objective design standards either in by-right ordinance, state law requirements or other Monterey County Code (County Code) requirements.

Therefore, the proposed higher-density residential potential would not introduce land uses that are substantially incompatible with surrounding development such that physical separation or isolation of adjacent neighborhoods would occur. Furthermore, the HEU6 also does not include goals, policies, or programs that would intentionally isolate neighborhoods, reconfigure circulation in a manner that disrupts existing community connection, or otherwise fragment established communities. The HEU6 would facilitate the accommodation of the County's Regional Housing Needs Allocation (RHNA) target by encouraging compact residential development patterns in areas planned for growth and served by existing infrastructure.

Therefore, implementation of the HEU6 would not directly or indirectly create physical barriers or otherwise physically divide an established community. Impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.11.5.2 Threshold 2: Conflict with Applicable Land Use Plans, Policies, and Regulations

**Threshold 2:** Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

### Impact Analysis

Land use impacts could be considered significant if proposed actions conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. The project involves amendments to the 2010 General Plan (i.e., Circulation, Conservation and Open Space, Land Use, and Public Services Elements), Area and Master Plans (i.e., CVMP, Central Salinas valley Area Plan, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, Greater Salinas Area Plan, North County Area Plan (Inland), and Toro Are Plan), LCP (i.e., North County LUPs [Coastal] and Carmel Area Land Use Plan and CIPs, and the Zoning Code (Inland and Coastal), adoption of the by-right housing ordinance with the Model Objective Design Standards, and other approvals as necessary to implement the Housing Element Update and comply with state law. Appendix B includes a non-exhaustive list of plans and policies that need to be modified as part of the project. The proposed amendments and adoption of new by-right housing ordinance need not be in perfect conformity with every individual policy, and conflict with a specific policy does not automatically constitute a significant environmental impact unless it results in a direct physical effect on the environment.

Under CGC Section 65589.5(a), the Legislature has concluded that "the lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." More specifically, the Legislature's stated intent is "to assure that counties and cities recognize their responsibilities in contributing to the attainment of the state housing goal…to assure that counties and cities will prepare and implement housing elements which…will move toward attainment of the state housing goal" (CGC Section 65581). The HEU6 would allow housing development to meet the assigned RHNA, and meet the County's desire to provide adequate and affordable housing throughout its jurisdiction.

The project involves a Housing Element Update, accordingly, no specific development projects are proposed at this time. Rather, the project consists of policy amendments, including modifications to various General Plan and LCP policies, to ensure statutory and internal consistency across the County's planning documents.

The proposed high-density housing is inconsistent with current land use designations and certain environmental policies, especially if explicit or implied growth caps are stipulated in the General

Plan, Area and Master Plans, and LCP LUPs. However, the project includes text and map amendments to these specific policies to resolve these inconsistencies, and exempt opportunity sites from these unit limitations. Upon adoption of the project, the General Plan, LCP, and other planning documents would be internally consistent; therefore, the project would not result in a permanent or unresolvable conflict with an adopted land use plan or policy.

The policy amendments themselves would not introduce land use conflicts that would result in physical environmental impacts. Where known environmental and compatibility issues have been identified, the County has proactively proposed split zoning to directly avoid or minimize conflict with environmentally sensitive habitat areas, applicable ALUCPs, and potential visual resources impacts. Split-zoned opportunity sites are Opportunity Sites 10 through 15, 38, 43 through 47, 52, and 56.

The following analysis focuses on the potential conflicts of the proposed project with applicable plans, goals, and policies adopted for the purpose of avoiding or mitigating an environmental effect, and if conflicts exist, whether any such conflict would result in a significant environmental impact. Only the applicable provisions and policies have been included in the analysis. Also, the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of CEQA.

The proposed amendments resolve policy conflicts and establish internal consistency upon adoption. As a result, the physical development subsequently facilitated by HEU6 would not be prevented by conflict with any land use plan, policy, or regulation. However, the proposed amendments would exempt opportunity sites from growth cap policies in certain Area Plan, Master Plan, and LUP areas. These growth caps were originally established to protect against various environmental impacts, including but not limited to: groundwater sustainability and water supply, visual resources and neighborhood character, and traffic congestion. The PEIR identifies significant and unavoidable physical environmental impacts on aesthetics, agricultural and forestry resources, air quality, biological resources, greenhouse gas emissions, hydrology and water quality (groundwater recharge and supply) transportation (vehicle miles traveled), and utilities and service systems (water supply and infrastructure), which are analyzed separately in their respective sections of this PEIR. Therefore, although removing these growth caps does not itself constitute a land use conflict upon approval, this analysis considers the resulting environmental impacts as significant and unavoidable, as significant and unavoidable environmental impacts would remain.

### 2010 General Plan

As shown in Table 4.11-1, 2010 General Plan Consistency Analysis, the HEU6 is consistent with the vast majority of the relevant land use policies in the 2010 General Plan.

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| **General Land Use** | |
| GOAL LU-1. Promote appropriate and orderly growth and development while protecting desirable existing land uses. | |
| LU-1.1 The type, location, timing, and intensity of growth in the unincorporated area shall be managed. | **Consistent:** The project is intended to accommodate the fair share housing allocation for various income categories pursuant to assigned regional housing need allocation (RHNA). The HEU6 has been prepared under the oversight of the California Housing Community Development Department (CA HCD), and it promotes housing development in the UMC by allowing high-density residential units in locations carefully evaluated and selected after applying specific criteria and approved by the CA HCD for the Sixth Cycle period of 2023–2031. The minimum and maximum range of density has also been carefully established to meet the state and regional housing laws. The actual timing of development would be determined through market demand. The type, location, and intensity of growth in the UMC would be managed through the approval of the HEU6. No conflict would occur. |
| LU-1.2 Premature and scattered development shall be discouraged. | **Consistent:** Opportunity sites have been carefully selected after applying specified criteria to identify sites where planned residential capacity can be realistically achieved to ensure that premature and scattered development do not occur. The County prioritized sites within designated planning areas and infill locations to minimize haphazard development patterns. The County also considered sites with existing infrastructure and areas already identified for growth in order to avoid sprawl. The project would not conflict with this policy. |
| LU-1.3 Balanced development of the County shall be assured by designating adequate land for a range of future land uses. | **Consistent:** The HEU6 would change zoning and land use designations to high-density residential for 56 opportunity sites totaling approximately 446 acres within UMC. However, Monterey County totals approximately 3,300 square, and only about 2 percent of the total land area consists of the 12 incorporated cities and the vast majority of the land is unincorporated area, Also, according to the Land Use Element of the 2010 General Plan, approximately 1% of UMC is developed with residential structures. And as stated in the consistency analysis for Policy LU-1.2, the sites have been carefully selected to meet the housing needs. Planning for additional housing supports the policy of designating adequate land for a range of future land uses. |
| LU-1.4 Growth areas shall be designated only where an adequate level of services and facilities such as water, sewer, fire and police protection, transportation, and schools exists or can be assured concurrent with growth and development. Phasing of development shall be required as necessary in growth areas in order to provide a basis for long-range services and facilities planning. | **Consistent:** As discussed in various sections of this PEIR, (Sections 4.16, Transportation; 4.18, Utilities and Service Systems; 4.19, Wildfire, and Chapter 7, Effects Found Not to Be Significant) adequate level of services and facilities would be provided based on compliance with the existing County Code and mitigation measures prior to the commencement of individual development projects. Public Safey Element Policy PS-1.1 includes a policy that states no discretionary applicable for review development shall be approved unless |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | the County finds that Adequate Public Facilities and Services (APFS) for that use exist or will be provided concurrently with the development. Infrastructure and services standards for APFS are provided for water, sanitation, solid waste, stormwater and drainage, emergency response time for fire, sheriff, and ambulance, and road intersection level of service improvements. When selecting opportunity sites, the County considered sites with existing infrastructure and areas already identified for growth in order to avoid sprawl. Furthermore, up to 30 dwelling units per acre in HDR/30 is only in areas where public sewer service and water is available. Actual development would be determined by market demand and development interest, and the project would not conflict with phasing of development. |
| LU-1.5 Land uses shall be designated to achieve compatibility with adjacent uses. | **Consistent:** Opportunity sites have been carefully evaluated and selected after applying specific criteria. The County prioritized sites within or adjacent to Community Areas, Rural Centers, and Affordable Housing Overlay districts to minimize haphazard development patterns. As discussed in Section 4.1, Aesthetics; 4.2, Agriculture and Forestry Resources; 4.4, Biological Resources; 4.9, Hazards and Hazardous Materials; 4.10, Hydrology and Water Quality; and 4.19, Wildfire, existing regulatory requirements, and appropriate mitigation measures and objective design standards would ensure that surrounding land uses are compatible with adjacent land uses. The County also considered sites with existing infrastructure and areas already identified for growth in order to avoid sprawl. Therefore, project would be compatible with adjacent uses, and no conflict would occur. |
| LU-1.6 Standards and procedures to assure proper levels of review of development siting, design, and landscaping shall be developed. | **Consistent**: The project involves a planning document approval and does not involve specific development projects with site plans, elevations, and landscaping plans. There are existing state, regional, and local standards and procedures requirements related to siting, design, and landscaping such as the County Code (including but not limited to coastal and inland Zoning Code, grading code, and water and energy efficient landscaping). Additionally, the qualifying by-right projects streamlining under the Objective Process would be required to comply with the proposed by-right housing ordinance and objective design standards that would be adopted concurrently with the project. |
| LU-1.7 Clustering of residential development to those portions of the property which are most suitable for development and where appropriate infrastructure to support that development exists or can be provided shall be strongly encouraged. Lot line adjustments among four lots or fewer, or the re-subdivision of more than four contiguous lots of record that do not increase the total number of lots, may be | **Consistent**: Opportunity sites have been carefully selected and include those portions of the property which are most suitable for development and where appropriate infrastructure exists or can be provided as discussed throughout this PEIR. The project also proposes split zoning to avoid sensitive resources and safety hazards. The project would not restrict lot line adjustments or re-subdivision. The project would not conflict with this policy. |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| allowed pursuant to this policy without requirement of a general plan amendment. | |
| LU-1.8 Voluntary reduction or limitation of development potential in the rural and agricultural areas through dedication of scenic or conservation easements, Transfer of Development Rights (TDR), and other appropriate techniques shall be encouraged. The Transfer of Development Credit (TDC) program in the Big Sur Land Use Plan is a separate program to address development within the critical viewshed. A TDR Program shall be established to provide a systematic, consistent, predictable, and quantitative method for decision-makers to evaluate receiver sites in areas of the unincorporated County with priority for locations within Community Areas and Rural Centers. The program shall include a mechanism to quantitatively evaluate development in light of the policies of the General Plan and the implementing regulations, resources and infrastructure, and the overall quality of the development. Evaluation criteria shall include but are not limited to:<br>a. Site Suitability<br>b. Infrastructure<br>c. Resource Management<br>d. Proximity to a City, Community Area, or Rural Center.<br>e. Environmental Impacts and Potential Mitigation<br>f. Proximity to multiple modes of transportation<br>g. Avoidance of impacts to productive farmland. | **Not Consistent**: This policy involves voluntary reduction or limitation of development potential in the rural and agricultural areas. Some of the opportunity sites are zoned and/or operating as farmland. Some of the sites have strong owner interest for development. The HEU6 includes Policy H-3.G, Agricultural Land Preservation and Mitigation Program, that states that the County will continue to implement and update as appropriate County Code Chapter 21.92 – Regulations to Mitigations for Development on Farmland. Additionally, mitigation measures as outlined in the Section 4.2, Agriculture and Forestry Resources. As such, the project would not prohibit or obstruct implementation of these voluntary programs to preserve and mitigate for agricultural uses. Therefore, the project would not conflict with this policy. |
| LU-1.9 Infill of vacant non-agricultural lands in existing developed areas and new development within designated urban service areas are a priority. Infill development shall be compatible with surrounding land use and development. | **Consistent**: The project would change zoning and land use to accommodate high-density residential uses in 56 opportunity sites. Opportunity sites have been carefully selected after applying specified criteria to identify sites where planned residential capacity can be realistically achieved to ensure that premature and scattered development do not occur. The County prioritized sites within designated planning areas and infill locations to minimize haphazard development patterns. The County also considered sites with existing infrastructure and areas already identified for growth in order to avoid sprawl. The project would not conflict with this policy. |
| LU-1.10 Off-site advertising shall be discouraged to enhance public safety and to avoid visual clutter and scenic intrusion. Off-site advertising may only be considered in heavy commercial and industrial zoning districts. Such signs shall not abut residential districts. | **Consistent**: The project would not involve any off-site advertising; therefore, would not conflict with this policy. |
| LU-1.11 Development proposals shall be consistent with the General Plan Land Use Map designation of the subject property and the policies of this plan. | **Consistent**: The project will not be consistent with the General Plan Land Use Map designations because it involves amendments to the General Plan and other related planning area maps. Amendments are necessary to accommodate various income housing units required by RHNA.<br>While the project would not be consistent with the existing land use designations prior to approval of the proposed |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | amendments, the project includes all necessary legislative actions to establish consistency between the proposed land use designations and the project. This is an inherent and anticipated feature of any General Plan amendment process. This policy governs the consistency of individual development proposals with the adopted General Plan and is not intended to preclude the County from exercising its legislative authority to amend the General Plan itself. The HEU6 is a mandatory element of the General Plan and failure to adopt a compliant Housing Element exposes the County to various negative ramifications such as legal liability, loss of permitting authority, and builder's remedy applications under CGC Section 65589.5. The amendment process is the appropriate and legally prescribed mechanism for updating land use designations.<br>Following adoption of the HEU6 and associated actions, including related map changes, the project would be consistent with the amended General Plan Land Use Map and applicable policies. All subsequent development proposals on rezoned sites will then be evaluated for consistency with the amended General Plan Land Use Map and the policies of this plan, consistent with the intent of Policy LU-1.11. Therefore, the project is consistent with Policy LU-1.11, as interpreted in the context of a state-mandated legislative planning action. |
| LU-1.12 Structures in electrical transmission corridors or rights-of-way shall be prohibited | **Consistent**: The project would not place any structures in electrical transmission corridors or rights-of way. |
| LU-1.13 All exterior lighting shall be unobtrusive and constructed or located so that only the intended area is illuminated, long range visibility is reduced of the lighting source, and off-site glare is fully controlled. Criteria to guide the review and approval of exterior lighting shall be developed by the County in the form of enforceable design guidelines, which shall include but not be limited to guidelines for the direction of light, such as shields, where lighting is allowed. | **Consistent**. The project involves approval of the HEU6 and other approvals as necessary to implement the HEU6 to implement the HEU6 and comply with state law, and does not involve development of specific projects. Therefore, each project's exterior lighting design would be reviewed at the time of project application. Future development project would be required to comply with the existing County Code, Section 21.63, Design Guidelines for Exterior Lighting and other required regulatory requirements, including but not limited to the by-right ordinance and the objective design standards as they relate to exterior lighting design standards. |
| LU-1.14 Consistent with the provisions of the State Subdivision Map Act, lot line adjustments shall be between four or fewer existing adjoining parcels. | **Consistent**: The project involves approval of the HEU6 and other approvals as necessary to implement the HEU6 to implement the HEU6 and comply with state law, **and** does not involve development of specific projects. Future development applications would be required to comply with the provisions of the State Subdivision Map Act at the time of application review and approval. |
| LU-1.15 Where a lot line adjustment may be configured to result in lots conforming to the policies and standards of this General Plan, that configuration is required. Lot line adjustments that may compromise the location of wells, on-site wastewater systems or envelopes should not be approved. | **Consistent**: The project involves approval of the HEU6 and does not involve development of specific projects. Future development applications would be required to comply with the provisions of the existing lot line adjustment regulations at the time of application review and approval. Furthermore, |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | no known lot line adjustments are required as part of the project. The project would not conflict with this policy. |
| LU-1.19 Community Areas, Rural Centers and Affordable Housing Overlay districts are the top priority for development in the unincorporated areas of the County. Outside of those areas, a Development Evaluation System shall be established to provide a systematic, consistent, predictable, and quantitative method for decision-makers to evaluate developments of five or more lots or units and developments of equivalent or greater traffic, water, or wastewater intensity. The system shall be a pass-fail system and shall include a mechanism to quantitatively evaluate development in light of the policies of the General Plan and the implementing regulations, resources and infrastructure, and the overall quality of the development. Evaluation criteria shall include but are not limited to: a. Site Suitability b. Infrastructure c. Resource Management d. Proximity to a City, Community Area, or Rural Center e. Mix/Balance of uses including Affordable Housing consistent with the County Affordable/Workforce Housing Incentive Program adopted pursuant to the Monterey County Housing Element f. Environmental Impacts and Potential Mitigation g. Proximity to multiple modes of transportation h. Jobs-Housing balance within the community and between the community and surrounding areas i. Minimum passing score Residential development shall incorporate the following minimum requirements for developments in Rural Centers prior to the preparation of an Infrastructure and Financing Study, or outside of a Community Area or Rural Center: 1) 35% affordable/Workforce housing (25% inclusionary; 10% Workforce) for projects of five or more units to be considered. 2) If the project is designed with at least 15% farmworker inclusionary housing, the minimum requirement may be reduced to 30% total. This Development Evaluation System shall be established within 12 months of adopting this General Plan. | **Consistent**: The HEU6 includes opportunity sites within or adjacent to the top priority districts for development (i.e., Community Areas, Rural Centers, and Affordable Housing Overlay districts) and supports housing development goals, policies, and programs for these areas, therefore, are not subject to the Development Evaluation System. Although some areas are not within these top priority areas for development, the proposed amendments would designate these sites as priority development districts, so that they would not be subject to the Development Evaluation System upon approval of the project. The amendment would exempt opportunity sites from the Development Evaluation System. The project would not conflict with this policy. |
| LU-1.20 Residential development within unincorporated Monterey County shall be limited to area build-out. Area build-out means specific land use/density designations as mapped in the area plans and adopted as part of this General Plan. The Resource Management Agency shall develop a tracking system for build-out by Planning Area and shall present an annual report before the Planning Commission. | **Consisten**t: The project involves amendments to the General Plan and other related planning area maps to modify some land use/density designations as mapped in the Area Plans and adopted by the General Plan to accommodate various income housing units required by RHNA. While the project would not be consistent with the existing land use designations or area buildout limitations established in the General Plan, prior to approval of the proposed amendments, the project includes all necessary legislative actions to establish consistency between the proposed land use designations and the project. Following adoption of the proposed project, including amendments of maps in Area Plans, the project would be consistent. |
| LU-1.21 Land Uses in Support of Well Stimulation Treatments Are Prohibited. | **Consistent**: "Well stimulation treatments" means any treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | formation. The project does not involve any well stimulation treatments. |
| **Residential** | |
| GOAL LU-2. Encourage residential development of various types and densities for all income levels in areas where such development would be accessible to major employment centers and where adequate public services and facilities exist or may be provided. | |
| LU-2.1 Sufficient sites for housing shall be designated, including rental housing, factory built housing and mobilehomes, to make adequate provision for the existing and projected needs of all economic segments of the community. | **Consistent**: The project involves amendments to land use designations and zoning to increase residential density at opportunity sites, in order to provide sufficient housing to meet Sixth Cycle RHNA requirements and address the projected needs of all economic segments of the community. |
| LU-2.2 Residential development shall be limited in areas that are unsuited for more intensive development due to physical hazards and development constraints, the need to protect natural resources, or the lack of public services and facilities. | **Consistent**: The project allows high-density residential development in areas with less development constraints and where feasible to accommodate development without adversely affecting natural resources. For example, the total rezoned acreage for certain sites was reduced to protect existing natural resources and minimize hazards. Opportunity Sites 11 through 15 are proposed to be split-zoned HDR/30 and RC (Resource Conservation) to reduce impacts on the Tembladero Slough and allow development to occur while avoiding sensitive natural resources. Opportunity Site 52 is proposed to be split-zoned HDR/30 and RC to allow development while preserving views from Highway 68. Opportunity Site 56 is proposed to be split-zoned HDR/25 and RC to provide a larger setback from the Carmel River. In addition, Opportunity Sites 46 and 47 are proposed to be split-zoned to address safety hazards associated with airport operations. Also, HDR/30 is allowed only in areas where public sewer and water services are available. The PEIR also includes protective measures through implementation of the proposed by-right ordinance, objective design standards, and mitigation measures to ensure that natural resources are protected. Sections 4.1, Aesthetics; 4.2, Agriculture and Forestry Resources; and 4.4, Biological Resources, discusses natural resources on and surrounding opportunity sites and mitigation measures that would protect them. Furthermore, future development projects would be subject to the Public Safey Element policies such as Policy PS-1.1 that establishes APFS requirements and Policy PS-1.3 that states no discretionary application for new development shall be approved unless the County finds that APFS for that use exist or will be provided concurrently with the development. Infrastructure and services standards for APFS are provided for water, sanitation, solid waste, stormwater and drainage, emergency response time for fire, sheriff, and ambulance, and road intersection level of service improvements. |
| LU-2.3 High density residential areas shall be designated closest to urban areas, in community areas, rural centers or existing unincorporated communities. | **Consistent**: The project involves allowing high-density residential units close to existing unincorporated communities designated as Community Areas, affordable housing overlays, or Rural Centers. Other sites are located in close proximity to urban areas and cities (specifically the Cities of Monterey and Salinas). Although the sites are distributed in various |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | geographical areas of the unincorporated County, none are in rural, isolated areas where there are no nearby urban areas or existing communities. The project would amend this policy to include opportunity sites. The project supports this policy. |
| LU-2.4 Areas designated for residential use shall be located with convenient access to employment, shopping, recreation, and transportation. Higher density residential areas should be located with convenient access to public transit. | **Partially Consistent**: The opportunity sites are served by the existing roadway system, which provides access to employment centers, shopping, recreational opportunities, and transportation facilities. Opportunity sites have been carefully selected after applying specified criteria to identify sites where planned residential capacity can be realistically achieved to ensure that premature and scattered development do not occur. The County prioritized sites within designated planning areas and infill locations to minimize haphazard development patterns. The County also considered sites with existing infrastructure and areas already identified for growth in order to avoid sprawl. The project would not conflict with this policy. Not all opportunity sites have convenient access to public transit because some areas within the UMC are not adequately served by the existing transit system. As discussed in Section 4.16, Transportation, 51 of 56 opportunity sites are within 0.5 mile of a transit stop. However, in some cases, while transit facilities such as bus stops may be located nearby, bus routes and service frequencies may be limited. Nevertheless, the project would encourage housing development and would not preclude future housing from being developed in locations with more convenient access to employment, shopping, recreation, and transportation services. Furthermore, there are a number of policies within the plan supporting housing development near transit including policies programs H-2.G, H-5.B. and Policy H-3.8. Program H-2.G includes providing incentives and density bonus concessions for developments that provide TOD. Policy H-3.8 states that the County will explore collaboration with cities to prepare growth strategies that provide for housing near jobs and transit. Program H-5.B commits to identifying sites that comply with SB-10 and amending development standards to facilitate development in transit rich areas. |
| LU-2.5 Adequate circulation rights-of-way shall be delineated within each residential area. | **Consistent**: The opportunity sites are served by existing roadway system. Future development applications would be reviewed by the County to ensure that adequate circulation rights-of-way are delineated. |
| LU-2.6 New land use activities or changes in land use designations that may potentially be nuisances and/or hazards shall be discouraged within and in close proximity to residential areas. | **Consistent**: The project would allow high-density residential on the opportunity sites, which would be compatible with other uses, such as residential, commercial and mixed uses. The project does not involve incompatible uses that may potentially create nuisances and/or hazards in other residential areas. |
| LU-2.7 Open space may be provided in and/or on the fringes of residential areas | **Consistent**: The project does not involve any changes to open space land use designation. Open space designations would continue to be provided in and/or on the fringes of residential areas. The County is currently undertaking a |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | separate effort to update the Open Space and Conservation Element pursuant to SB 1425 and AB 1889. |
| LU-2.8 The County shall designate and establish regulations for an Agricultural Buffer/conservation easement (AB) designation to protect the existing agricultural operation. | **Consistent**: The project would incorporate mitigation measures to enforce agricultural buffer requirements identified in various County planning documents (e.g., Section 21.66.030 of the County Code, Section 20.144.080(D)(6) of the CIP, or Section 20.146.070(D)(2) of the CIP) as described in Section 4.2, Agriculture and Forestry Resources. |
| LU-2.9 In areas designated for agricultural uses where development of legally subdivided land would promote incompatible residential development, the County shall solicit and encourage the voluntary donation of conservation easements or other development restrictions to the County or to a qualified private nonprofit organization in order to preserve the agricultural use of the land. | **Consistent**: The project involves conversion of agricultural land to high-density residential uses. Policy H-3.G, Agricultural Land Preservation and Mitigation Program, that states that the County will continue to implement and update as appropriate County Code Chapter 21.92 – Regulations to Mitigations for Development on Farmland. Additionally, mitigation measures as outlined in the Section 4.2, Agriculture and Forestry Resources. Mitigation for these impacts includes preparation and implementation of a Farmland Mitigation Plan, which includes Mitigation Lands Protected by a Farmland Conservation Easement, Farmland Deed Restriction, or a Qualifying Conservation Entity purchased using In-Lieu Fees. The project would not prohibit the County to solicit and encourage voluntary donation of conservation easements or other development restrictions in order to preserve the agricultural use of the land surrounding properties designated for development. |
| LU-2.10 In areas where General Plan policy has not applied policy restrictions due to resource constraints, one accessory housing unit shall be allowed on a residentially designated lot if it meets the following criteria: a) adequate water and sewer facilities exist, which may include on site wells and on-site wastewater treatment systems; b) the lot is zoned for single family or multi family use; c) the lot contains an existing single family dwelling; d) the increased floor area of an attached second unit does not exceed 30% of the existing living area of the main housing unit; e) the total area of floor area for a detached second unit does not exceed 1,200 square feet; f). height, setback, lot coverage and other applicable zoning regulations are met; g) a long term sustainable water supply exists in an area governed by a County-adopted Community Plan or Specific Plan, the Community Plan or Specific Plan shall govern the permissibility of accessory housing units. | **Partially Consistent**: The project involves amendments to the General Plan policies, including amendment to this policy to accommodate the HEU6 and resolve internal policy conflicts. The policy would continue to allow accessory housing unit where it meets certain criteria related to resource constraints, as amended. |
| **City Centered Growth**<br>LU-2.14 Work with AMBAG and cities to direct the majority of urban growth including higher density housing development into cities and their spheres of influence with an emphasis on redevelopment and infill. | **Partially Consistent**: Opportunity Site 53 is within the City of Marina and HDR/30 is proposed for the 47.52-acre site. There are also several opportunity sites that are in proximity to existing development and the City of Salinas's and City of Monterey city limits and sphere of influence. However, because RHNA allocations are assigned by jurisdiction, incorporated cities are responsible for meeting their own |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | RHNA targets independently of the County. Therefore,, the County is required to plan for and accommodate its RHNA obligation within its unincorporated areas. Given this jurisdictional constraint, directing the majority of urban growth into cities and their spheres of influence is not a viable strategy for the County to achieve RHNA compliance. |
| LU-2.16 In coordination with the cities, sufficient land shall be designated to locate new housing as close to employment centers as feasible, and to minimize conflicts, competition, and consumptive land use patterns. | **Consistent**: To the extent feasible, opportunity sites include sites located near employment centers to reduce commute distances. Opportunity sites are also included in various planning areas, including: Salinas Valley CPAs (Greater Salinas; Central Salinas Valley); South County CPA; North County Inland to facilitate the potential for farmworker housing development. The HEU6 includes programs to promote and accommodate employee housing. |
| LU-2.17 In cooperation with the cities and LAFCO: a. Spheres of influence to represent the probable 20-year growth area around each city shall be designated as an Urban Reserve (UR) overlay within this general plan. b. Any city annexation request or request for a change in the city's boundaries or sphere of influence may be supported if it is found to be consistent with County General Plan policies, including: 1. Directing City growth away from the highest quality farmlands. 2. Providing adequate buffers (see Policy AG-1.2) along developing agricultural-urban interfaces. 3. Mitigating impacts to County infrastructure. Requests inconsistent with County General Plan policies may be opposed. | **Consistent**: This policy applies primarily to annexations and sphere of influence changes, none of which are proposed by the project. However, the project is consistent with the intent of the policy because it directs housing opportunities toward developed and urbanizing areas, would not interfere with agricultural buffers, and would not create substantial unmitigated impacts on County infrastructure. The County has coordinated with cities on designating opportunity sites in and near City boundaries. |
| LU-2.18 The County shall critically review development proposals and general plan amendments within the cities to assure that the impacts of growth in the cities on the County's infrastructure are adequately quantified and fully mitigated. | **Consistent**: The County is conducting a comprehensive environmental review of potential impacts, including infrastructure demands, associated with future development anticipated under the HEU6. Opportunity Site 53 is within the City of Marina city limits, and the City is in concurrence with the County to provide housing units on that site. |
| LU-2.19 The County shall refer amendments to the General Plan and zoning changes that would result in the creation of new residential, industrial, or commercial areas to the nearest cities for review and comment. | **Consistent**: The County will refer amendments resulting from the project to affected cities for comment, and ongoing coordination with cities has occurred during the Housing Element Update process. |
| **Community Areas**<br>LU-2.20 The County shall establish and emphasize Community Areas as the preferred location and the priority for additional development in the County to support a mix of land use types at an urban level. Community Areas are planned population centers where new development in the unincorporated area shall be actively supported as the County's primary planning priority. | **Partially Consistent**: A total of 20 opportunity sites out of 57 are within Community Areas (i.e., Boronda, Castroville,, Chualar, Ford Ord/East Garrison, and Pajaro). |
| LU-2.21 The following areas are designated as Community Areas (maps are located at the end of this Element):<br>a. Boronda (Figure CA1) | **Partially Consistent.** The HEU6 directs housing to designated Community Areas including Boronda, Castroville, Pajaro,, Chualar, and Fort Ord/East Garrison. No expansion beyond mapped boundaries is proposed at this time. |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| b. Castroville (Figure CA2). (as applicable to the inland area of the County)<br>c. Chualar (Figure CA3). Boundaries for the Chualar Community Area are to be developed by a citizen group with recommendation to the Board of Supervisors, but shall not exceed 350 acres over the life of this Plan (20 years). Planning for the Chualar Community Area and any Community Plan ultimately adopted for Chualar shall be consistent with that certain Settlement Agreement between Chualar Area Concerned Citizens, et al. and the County of Monterey in Chualar Area Concerned Citizens, et al. v. County of Monterey (Monterey County Superior Court Case no. 107519), executed on or about October 16, 2001.<br>d. Fort Ord/East Garrison (Figure CA4, and Policy LU-2.25)<br>e. Pajaro (Figure CA5).<br>The maps are descriptive of the Community Area, but may be modified through the Community Plan/Specific Plan process. Establishing Chualar Community Area boundaries and expansion of established Community Area boundaries shall require an amendment to this General Plan. | |
| LU-2.22 Community Areas shall be designed to achieve a sustainable, balanced, and integrated community offering:<br>a) A vision for that community<br>b) Various types and nature of land use designations including:<br>- A diverse range of residential densities and housing types.<br>- A mix of retail commercial businesses and offices.<br>- Industrial development where appropriate.<br>- A variety of recreational opportunities and public amenities integrating enhancement of existing natural resources into the community where possible.<br>c) Adequate public facilities and services including public water and sewer, an extensive road network, public transit, safety and emergency response services, adequate flood control, parks, and schools.<br>d) Opportunities for workers to live near jobs | **Consistent**. Sites support a balanced mix of residential densities and are located in areas with existing or planned public infrastructure and services. HEU6 enables housing to support walkable, sustainable communities with access to amenities. Programs are included to complete and/or update community planning documents in Community Plan areas. |
| LU-2.25 Prior to the adoption of a Community Plan for a Community Area, interim development, limited in scale and in accordance with the following criteria, may be allowed:<br>a. Affordable housing consistent with the density criteria established for Community Areas in the Housing Element as long as such projects do not impede overall development of the Community Area according to the design goals listed in Policy LU-2.22;<br>b. One single family home on a lot of record;<br>c. Commercial use at a neighborhood serving scale consistent with the underlying land use designation; | **Not Consistent.** This policy limits development in Community Areas prior to adoption of a Community Plan and allows one single-family home on a lot or record in Community Area as interim development. Development of high-density housing in Community Plan areas without a Community Plan would not be consistent with this policy. However, this policy would be amended to resolve internal consistency. |

**Table 4.11-1. 2010 General Plan Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| d. Subdivision or lot line adjustment of agricultural parcels for agricultural uses.<br>e. Minor subdivisions as long as such projects do not impede overall development of the Community Area according to the design goals listed in Policy LU-2.23. | |
| **Rural Centers**<br>LU-2.26 Rural Centers are existing areas containing concentration of development that includes higher intensity uses than typically found in rural areas. Rural Centers with the potential for improved infrastructure could develop into a future Community Area over the life of this general plan. New development other than within Community Areas shall be encouraged to be located within Rural Centers. | **Consistent**. While most sites are in or adjacent to Community Areas (Boronda, Castroville, Pajaro, Chualar, and Fort Ord/East Garrison) four opportunity sites are within Rural Centers (i.e., three in San Lucas and one in Pine Canyon [King City]), where existing development and infrastructure can support limited infill. This supports compact growth in appropriate rural contexts. |
| **LU-2.28.** Rural Centers shall be allowed to develop over the life of this plan, maintaining a village character, while allowing greater intensity development. Residential development in Rural Centers shall normally range from one to five units per acre, but may be allowed to develop at a density of 10 to 15 units per acre if processed as part of the Affordable/Workforce Housing Incentive Program, provided adequate public services, infrastructure, and access to job-centers are provided concurrent with the development. Neighborhood commercial uses may also be developed in support of the residential uses. Rural Centers shall be planned to function as small communities/villages providing a range of housing types and affordability levels appropriate to the location and population. | **Partially Consistent.** This policy allows greater intensity development while maintaining a village character in Rural Centers. It sets a density of 10 to 15 units per acre, and the proposed high-density housing in Rural Centers. Opportunity Sites 32, 33, and 34 are located within the San Lucas Rural Center, and Opportunity Site 42 is located within the Pine Canyon (King City) Rural Center, and the proposed rezone to HDR/25 would not be consistent with this policy. Although this policy would be amended to accommodate additional density, demonstration of adequate public services and infrastructure would continue to be required. |
| LU-2.30 In Rural Centers, a mix of small-scale retail and commercial service uses primarily serving local residents, employee housing ancillary to local businesses, low to medium density residential uses and public service facilities serving the local area, and tourist services shall be encouraged. Uses shall be at a scale and design that blends with the rural character of the area. | **Partially Consistent.** This policy encourages low to medium density residential uses in Rural Centers. Although the project would rezone opportunity sites in Rural Center to high-density residential uses, as discussed in Section 4.1, Aesthetics, individual projects would be reviewed and designed to ensure compatibility with the surrounding characteristics of the area. This policy would be amended to resolve internal consistency. |

## Area and Master Plans

The Monterey County Area Plans and Master Plans are components of the Monterey County General Plan that provide more detailed land use policy direction suitable to the unique environmental, agricultural, community, and infrastructure characteristics of specific geographic subareas within UMC. These plans supplement the broader countywide goals and policies of the 2010 General Plan by establishing localized planning frameworks intended to guide growth, preserve community character, protect natural and agricultural resources, and ensure that development occurs in a manner consistent with available infrastructure and public services.

The HEU6 identifies opportunity sites across these planning areas. The following summarizes the relationship between the proposed HEU6 and the applicable plans:

**Carmel Valley Master Plan –** Includes a total of 14 opportunity sites (Opportunity Sites 17 through 23, 35 through 38, and 54 through 56). Opportunity Sites 23 and 36, and a small portion of 56 are within the Affordable Housing Overlay Areas of the Mid-Carmel Valley per Figure AHO-1 of the 2010 General Plan Land Use Element. The intent of the CVMP is to recognize the existing broad-scale differences in development intensity within the valley and guide new development in a manner that supports the desirable attributes of existing land use patterns while discouraging resource conflicts that could adversely affect the valley's essential character. Policy CV-1.1 requires that all policies, ordinances, and decisions regarding Carmel Valley to be consistent with the goal of preserving Carmel Valley's rural character, and require development to follow a rural architectural theme with design review; Policy CV-1.5 indicates that maximum residential densities are shown on the CVMP Land Use Map, and that attainment of maximum density is depend on conformity of the proposed project to plan goals and policies; Policy CV-1.6 limits new residential subdivision in Carmel Valley to 190 units. Policy CV-1.8 requires cluster development to meet the objectives of the Master Plan, protect visible open space in sensitive visual areas or natural resources, among others. Policy CV-1.20 requires Design ("D") and site control ("S") overlay district designations to the Carmel Valley area and design review for all new development throughout the Valley. This policy also provides development guidelines that require development to be visually compatible with the character of the Valley among others. The HEU6 would result in exceedance of the unit limitation identified in Policy CV-1.6. However, the proposed amendments to the CVMP would exempt the opportunity sites from this policy. Therefore, with project approval, there would be no land use policy conflict. Opportunity sites within the CVMP area are generally located in areas already developed with a variety of land uses and would not result in sprawl by substantially alter the existing development pattern. The CVMP also includes policies intended to protect natural resources, including biological communities, agricultural lands, the Carmel River and its riparian corridor, air quality, and scenic resources. Once the project is adopted, future development would be internally consistent with and be subjected to policies protecting the Carmel River riparian corridor, biological communities, and scenic resources.

**Central Salinas Valley Area Plan –** Includes a total of nine opportunity sites (Sites 25 through 29, 32 through 34, and 42). The Central Salinas Valley Area Plan contains special treatment areas with area-specific policies and development considerations. However, the opportunity sites are not located within designated special treatment areas and therefore would not be subject to those additional policy requirements that could create a land use conflict.

**Greater Monterey Peninsula Area Plan –** Includes Opportunity Sites 40, 45, 46, and 52. Opportunity Site 52 is within the Affordable Housing Overlay Areas for Monterey Airport & Vicinity, as shown on Figure AHO-2 of the 2010 General Plan Land Use Element. The Greater Monterey Peninsula

Area Plan establishes supplemental policies addressing visual resources, scenic character, and compatibility with surrounding development, and also identifies special treatment areas. Relevant policies include Land Use Policy GMP-1.1, requires the County to overlay properties north and south of Highway 68 and west of Laureles Grade with a Visually Sensitive District ("VS") and/or other appropriate zoning designation to regulate the location, height, and design of structures within this unique scenic corridor. Opportunity Sites 40, 45, and 52 are adjacent to or within 0.25 mile of Highway 68, currently designated with the "D" (Design Control) zoning overlay, and are located within highly sensitive visual sensitivity area. As discussed in Section 4.1, Aesthetics, although mitigation measures have been incorporated to reduce potential impacts related to visual resources to regulate the location, height, and design of structures to minimize visual impacts for all opportunity sites in the Greater Monterey Peninsula Area Plan, impacts were determine to be significant and unavoidable.

Land Use Policy GMP-1.4 requires development proposals to include compatible open space uses located between other developed areas in order to maintain a rural atmosphere and to protect scenic resources. Opportunity Sites 45 and 46 include split zoning to maintain the current zoning of RDR/5.1 and PQP-D-S on portion of the sites to preserve a rural atmosphere and to protect scenic resources. Opportunity Site 52 would be split-zoned to HDR/30 and RC, therefore, would also minimize impacts on scenic resources, consistent with this policy. Opportunity Site 40 is not split-zoned, and the project would be partially consistent with this policy.

Land Use Policy GMP-1.5 states that open space low intensity educational, and recreational uses shall be considered to be appropriate and compatible land uses in environmentally sensitive areas and areas of high visual sensitivity. This policy does not list residential use as compatible uses in environmentally sensitive areas and areas of high visual sensitivity. Opportunity Sites 45 and 56 in the Greater Monterey Peninsula Arae Plan are mapped as high visual sensitivity area. However, these two sites include split zoning strategy to minimize environmental impacts and mitigation measures have also be incorporated to avoid and minimize biological resources and visual resources related impacts. This policy would also be amended to resolve conflict with implementing HEU6.

Consistency with Circulation Policies GMP-2.1, 2.4, 2.8, and 2.9 are provided in Table 4.16-1, Monterey County General Plan and Land Use Plan Consistency Analysis, of this PEIR.

Conservation/Open Space Policies GMP-3.1 requires the County to encourage creative public and private efforts to restore the scenic beauty of visually impacted common public viewing areas and GMP-3.2 requires development on canyon edges and hilltops to be designed to minimize the visual impact of the development. As discussed in Section 4.1, Aesthetics, the project would incorporate mitigation measures to encourage restoration of scenic beauty of visually impacted common public viewing areas and minimize the visual impact of the development. Split zoning strategy

implemented for Opportunity Sites 45, 46, and 52 also aims for the project to be consistent with this policy. Policy GMP-3.3, provides provisions that are required for properties identified as "sensitive" or "highly sensitive" areas generally visible from designated Scenic Highways in the Greater Monterey Peninsula Scenic Highway Corridors and Visual Sensitivity Map (Figure 14 of the Greater Monterey Peninsula Area Plan). As discussed in Section 4.1, Aesthetics, Opportunity Sites 40, 45, and 52 are in highly sensitive visual sensitivity area and would require to be designed to minimize visual impacts of the development. Compliance with these policies are discussed in Section 4.1, which determined that the project would be consistent with these policies through implementation of mitigation measures MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-CONS-3, thereby minimizing visual impacts. GMP-3.4, requires the use of landscaping and plant materials to soften or screen visual impacts and to provide diversity in developed areas. GMP-3.5 discourages removal of healthy, native oak, Monterey pine, and redwood trees; GMP-3.9 aims to preserve critical habitat areas as open space, and Policy 3.11 aims to develop riding and hiking trails to create a coordinated, area-wide trails system. Future development projects would continue to be subject to these policies to be consistent, and critical habits would be preserved through split zoning and by implementing mitigation measures as outlined in Section 4.4, Biological Resources. Policy GMP-3.14 requires the County to encourage development projects to be served by water from public utilities or mutual water companies, and if this is not possible, the County to consider the cumulative effects of the development's water use on wildlife, fish, and plant communities, and the supply available to existing users. Future development facilitated by the HEU6 would remain subject to applicable visual resource protection policies and development standards.

Safety Policy GMP-4.1 requires redwood, pine, oak forest, and chaparral habitat on land exceeding 25 percent slope to remain undisturbed due to potential erosion impacts and loss of visual amenities. As shown on Figures 4.4-1e, Vegetation Communities and Land Cover in Greater Monterey Peninsula Area Plan, Opportunity Sites 40, 45, and 46 include mixed conifer and oak woodland habitat types. And development of these sites would not conflict with this policy. Policy GMP-4.2 encourages development in the vicinity of the Monterey Peninsula Airport (now known as the Monterey Regional Airport) and the Marina Municipal Airport to be sited, designed, and/or constructed to minimize noise hazards from aircraft and other sources and adopt the Airport Noise Control and Land Use Compatibility standards for the areas in the vicinity of these airports. As discussed in Section 4.13, Noise, Threshold 3, Aircraft Noise, Opportunity Site 46 and 52 are within two miles of the Monterey Regional Airport but outside the outermost noise contour (65 community noise equivalent level [CNEL]). Therefore, development of Opportunity Sites 46 and 52 would not be significantly impacted by noise hazard from aircraft noise, where 65 CNEL is the County's acceptable ambient noise levels for multi-family residential uses. Furthermore, Opportunity Site 46 would be split-zoned to ensure compatibility with airport safety requirements. Opportunity Site 52 would also be split-zoned but due to the compatibility with airport safety requirements.

Public Services Policy GMP-5.2 requires each development proposal to be evaluated to determine the extent to which such development may help further the County's park and recreation facility goals, objectives, and policies. As discussed in Section 4.15, Recreation, future development projects are subject to the Quimby Act (CGC Section 66477), County Code Section 19.12.010 (which applies to coastal and inland areas), and Chapter 15.28 to ensure that impacts related to park and recreation facilities due to increased demand are reduced to a less than significant level either through dedication or fair share fee payment. Therefore, no conflict would occur.

**Fort Ord Master Plan –** Includes Opportunity Sites 31 and 47. The purpose of the Fort Ord Master Plan is to designate land uses and incorporate policies and programs consistent with the Fort Ord Reuse Plan adopted by the former Fort Ord Reuse Authority in 1997. The plan incorporates applicable policies and programs from the Reuse Plan and includes additional design objectives and land use guidance to further the adopted design principles. The plan promotes orderly, balanced, and well-planned development that supports educational, housing, and economic opportunities while protecting environmental resources. Future development facilitated by the HEU6 would remain subject to applicable policies and programs.

**Greater Salinas Area Plan –** Includes Opportunity Sites 1 through 6. Opportunity Sites 5 and 6 are in the Boronda Community Area but no Community Plan has been adopted for the Community Area. The Greater Salinas Area Plan includes supplemental policies related to visual resources, scenic corridors, and hillside protection, as well as special treatment areas. Policy GS-1.13 limits development on properties with residential land use designations located generally between Williams Road and U.S. Route 101 (also known as Highway 101) to a single-family home on a legal lot of record, and requires the County to conduct a comprehensive review of infrastructure constraints related to circulation, wastewater, and water supply. This restriction does not apply to development within adopted Community Areas, Rural Centers, the Affordable Housing Overlay, or Special Treatment Areas. Because the opportunity sites in the Greater Salinas Area Plan do not fall within any of these designated areas, the project includes amendments to the Greater Salinas Area Plan to exempt the opportunity sites from policies that would otherwise constrain implementation of HEU6. Upon adoption of these amendments, no conflict with Policy GS-1.13 will remain. Other various relevant policies include GS-2.3 regarding preservation of scenic highway character along the U.S. Route 101 bypass, GS-3.1 requiring vegetation on slopes exceeding 25 percent to remain undisturbed, and GS-3.2 encouraging incorporation of native vegetation to soften visual impacts. Opportunity Sites 5 and 6 are located within the Boronda Community Plan area. However, no community plan has been adopted for this community area. Future development would remain subject to applicable hillside, scenic resource, and grading regulations.

**North County Area Plan (Inland) –** Includes Opportunity Sites 8 through 15, 30, 39, 41, 44, 49, 50, 51, and 64. Within the Area Plan area: Opportunity Sites 11 through 15, 30, and 41 are located in

the Castroville Community Area, which has an adopted Castroville Community Plan, and Opportunity Site 49, 50, and 51 are within the Pajaro Community Area, but no community plan has been adopted. The North County Area Plan (Inland) contains supplemental policies related to infrastructure capacity, visual resources, biological resources, and geologic hazards. Relevant policies include NC-1.5, which limits development on properties with residential land use designations to the first single-family dwelling on a legal lot of record and limits development pending evaluation of infrastructure constraints related to circulation, wastewater, and water supply; Policies NC-3.1 through NC-3.5, which address protection of visually sensitive areas, habitats, and vegetation; NC-3.9, which restricts development on slopes with highly erodible soils exceeding 25 percent; and NC-5.1, which requires new developments to be designed to maximize prime groundwater recharge capabilities and to minimize runoff from the property. Policy NC-1.5's development restriction does not apply to development within adopted Community Areas, Rural Centers, or Affordable Housing Overlays. Not all opportunity sites located in the North County Area Plan are within adopted Community Areas, Rural Centers, or Affordable Housing Overlays. Infrastructure constraints related to wastewater and water supply are evaluated in Section 4.18, Utilities and Service Systems; impacts on visual resources and visually sensitive areas are addressed in Section 4.1, Aesthetics; impacts on sensitive habitats and vegetation are addressed in Section 4.4, Biological Resources; soils, slopes, and erosion hazards are addressed in Chapter 7, Effects Found Not to Be Significant, and in Section 4.10, Hydrology and Water Quality; and groundwater recharge and stormwater runoff impacts and mitigation measures are addressed in Section 4.10, Hydrology and Water Quality. As discussed, future development facilitated by the HEU6 on the opportunity sites identified above would be required to comply with applicable infrastructure, resource protection, and geologic hazard regulations established under the North County Area Plan (Inland) and other state and regional requirements to minimize potential environmental impacts. However, even with compliance with existing regulatory requirements and mitigation measures outlined in the respective sections, significant and unavoidable impact would remain in the areas of visual resources and compatibility and groundwater and water supply, among others. The project would involves amendments to existing North County Area Plan (Inland) policies to facilitate development under the HEU6 and resolve internal inconsistencies. Therefore, upon project approval, although no policy conflict would occur, environmental impacts would remain.

**Toro Area Plan –** Includes Opportunity Site 24. Opportunity Site 24 is within the Affordable Housing Overlay Areas for Highway 68 & Reservation Road as shown on Figure AHO-3 in the 2010 General Plan Land Use Element. The Toro Area Plan establishes supplemental policies addressing visual resources, scenic corridors, lighting, oak woodland protection, and erosion control. Relevant policies include Policy T-1.5, which encourages subdivision design outside critical viewsheds; Policy T-3.3, which requires setbacks and open space easements adjacent to designated scenic routes; Policy T-3.5, which requires lighting to minimize spillover and preserve

nighttime darkness; Policy T-3.7, which discourages removal of healthy native oak trees; and Policy T-4.1, which prohibits land uses and practices that substantially contribute to erosion, siltation, or flooding. Future development facilitated by the HEU6 would remain subject to applicable policies and programs.

### Community Areas

UMC includes Community Areas of Boronda, Fort Ord/East Garrison, Castroville, Pajaro, and Chualar. The County has prepared Community Plans (e.g., Castroville and Fort Ord), and has committed to preparing additional Community Plans, as long-range planning documents intended to guide growth and development in a manner that enhances the quality of life within their respective communities. These plans describe existing and anticipated development patterns and, in some cases, establish policies, development standards, design guidelines, and implementation measures intended to preserve community character and address environmental concerns. Opportunity Sites 25 through 29 are in the Chualar Community Area, Opportunity Sites 5 and 6 are in the Boronda Community Area, Opportunity Site 49, 50, and 51 are in the Pajaro Community Area designated in the 2010 General Plan, Opportunity Sites 11 through 15, 30, and 41 are in the Castroville Community Area, and Opportunity Sites 31 and 47 are in the Fort Ord Community Area, as designated in the 2010 General Plan.

Overall, the project is generally consistent with the intent of the Area Plans and Master Plans, which collectively seek to balance future growth and development with conservation of environmental resources, maintenance of community character, protection of agricultural lands, and orderly provision of infrastructure and public services. Additionally, the project involves amendments to these Area and Master Plans to be internally consistent. Although the project would not be consistent with every policy and program under them, under CEQA, as affirmed by the court in San Francisco Tomorrow v. City and County of San Francisco (2014) 229 Cal.App.4th 498, a project is not required to maintain "perfect conformity" with every General Plan goal or policy to be considered consistent with an applicable plan because general plans frequently contain broad, competing, or internally balancing policy objectives. Courts have recognized that lead agencies have discretion to weigh and balance those policies in determining overall consistency. While the project would not be consistent with the existing land use designations prior to approval of the proposed amendments, upon approval of the General Plan and LCP – LUP amendments and associated land use changes, the project would be consistent with the amended General Plan and LCP – LUP policies and provisions.

A policy inconsistency, by itself, does not constitute a significant environmental impact under CEQA. Rather, CEQA requires evaluation of whether a conflict with a plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would result in a significant physical environmental impact. Note that while the project facilitates housing development, it does not override the County's regulatory framework adopted for environmental protection, which is often triggered with a development application and subsequent discretionary

approvals. For future qualifying by-right projects streamlining under the Objective Process, compliance would be ensured through objective development standards as outlined in the proposed by-right housing ordinance. These objective standards stated in each environmental issue area of the PEIR implemented through mitigation measures would ensure that no conflict with a protective policy would occur that results in a significant environmental impact.

The policy amendments themselves would not result in a policy conflict that constitutes a significant environmental impact. However, implementing HEU6 would exempt opportunity sites from unit caps and growth caps that were explicitly or indirectly established in certain Area Plans, Master Plans, and LCP – LUPs. Developments facilitated under the HEU6 that exceed these caps would result in greater environmental impacts than would otherwise occur without the project, as discussed throughout this PEIR, including significant and unavoidable impacts with respect to aesthetics, agricultural and forestry resources, air quality, biological resources, greenhouse gas emissions, hydrology and water quality (groundwater recharge and supply) transportation (vehicle miles traveled), and utilities and service systems (water supply and infrastructure). Therefore, although the project would not create a policy conflict that is itself significant upon adoption, the resulting environmental impacts are significant and unavoidable. Accordingly, the land use impact is determined to be significant and unavoidable.

### City of Marina General Plan

Opportunity Site 53 is in the incorporated limits of the City of Marina and is designated Commercial – Multiple Use by the land use map and zoned C-R (Commercial/Multiple Family Residential District). Residential dwellings, including condominium and/or planned development projects and multiple-family residential dwellings as part of a mixed use development are permitted as conditional uses in this zone subject to the provisions of development standards for condominium/planned development projects and condominium conversions (Chapter 17.66 of the City of Marina Zoning Ordinance). The maximum density of 25 units per acre is allowed for mixed use developments and 20 to 35 units per acre for development that are allowed for exclusively residential. The current zoning designation for the City of Marina is provided for informational purposes because the University of California owns Opportunity Site 53. The University of California Regents is an autonomous governmental entity with jurisdiction over its properties, the University may develop the site without complying with City or County General Plan or zoning requirements. To ensure that the site can be counted toward the County's RHNA, the HEU6 includes an implementation program under Goal H-3 requiring the County and the City of Marina to establish a memorandum of understanding (MOU) or other agreement. This MOU would ensure that the site can accommodate a portion of the County's RHNA allocation and that development standards for the site are in alignment with the HEU6 rezoning program requirements. Therefore, no conflict would occur.

### 1982 General Plan (Coastal)

The 1982 General Plan (Coastal) laid the groundwork for the LCP – LUPs. Amendments are proposed as part of the project for consistency with the LCP – LUPs as discussed below.

### Monterey County Local Coastal Program – LUPs

Opportunity Sites 16 and 43 are within the Coastal Zone and are subject to the Carmel Area LCP provisions. Opportunity Site 48 is within the Coastal Zone and is subject to the North County (Coastal) LCP provisions. The LUPs indicate that the preservation of coastal resources including agricultural soils; environmentally sensitive habitat areas of estuaries and other wetlands, dunes, riparian areas, and oak woodland/maritime chaparral areas; water quality as impacted by point and non-point pollution, circulation and sedimentation from erosion; recreation and access opportunities; and the visual resources characteristic of the coast are prime issues of importance, and provides policies related to those topic areas.

The project includes amendments to the LCPs, including Carmel Area and North County (Coastal) LCP provisions to allow for increase to HDR designation and modify buildout number to implement the HEU6. The proposed project would increase permitted densities in these sites and result in amendments to these plans for consistency. However, the sites within the LUPs are already zoned for urban development (i.e., Opportunity Sites 16 and 43 are zoned MDR/2-D [CZ], and Opportunity Site 48 is currently zone MDR/4 [CZ]), and would not modify the overall intent of the LUPs to preserve various coastal resources. Furthermore, Site 16 has a Builder's Remedy application, and the state law limits the County's ability to deny such projects, provided that they meet statutory requirements for affordability. While Opportunity Site 43 is owned by the Stevenson School, which is directly adjacent to the south, this site has a residential development in the southern-east corner of the parcel along with ancillary structures. Opportunity Site 43 is proposed to be split-zoned so that only underutilized portion of the parcel is rezoned as HDR/30..

North County LUP's high-density residential use allows 5 to 10 units per acre (Policy 4.3.1.J). The project includes amendment so the North County LUP to allow 25 units per acre. Water Resources Policy 2.5.2.3 requires that new development be phased to ensure that existing water supplies are not committed beyond their safe long-term yields, which is defined as 50 percent of the buildout allowed under the LUP. The policy also requires that development that generate water demand exceeding the safe yield of local aquifers be allowed only after additional water supplies have been secured. Development projects would continue to be required to demonstrate that adequate water supplies have been secured.

Policy 4.3.3, Potential Buildout, indicates that the North County LUP would allow a buildout ranging from 6,165 to 7,835 housing units. Therefore, the safe long-term yields for North County LUP would be 50 percent of the buildout range, which is 3,083 to 3,918 housing units. The housing

opportunity sites would be exempt from the unit limitation policy to resolve internal policy consistency while complying with the state mandate to provide the assigned RHNA target

Land Use and Development Policy 4.3.5.7 states that new subdivision and development dependent on groundwater shall be limited and phased over time until an adequate supply of water to meet long-term needs can be assured. The policy also requires that water conservation and on-site groundwater recharge methods are incorporated into site and structure design to minimize the additional overdraft of groundwater accompanying new development. Policy 4.3.6.D.1 requires land divisions for residential purposes to be approved at a density determined by evaluation of site and cumulative impact criteria that include geologic, flood, and fire hazard, slope, vegetation, environmentally sensitive habitat, water quality, water availability, erosion, septic tank suitability, adjacent land use compatibility, public service and facility, and where appropriate, coastal access and visual resource opportunities and constraints. Policy 4.3.6.D.5 states that where public facilities or water supply necessary to support residential development are limited, residential growth should be phased to allow sufficient time for these essential elements to be provided.

Opportunity Site 48 is located within the North County LUP area and has a reasonable development capacity of 64 units is proposed for the site. The site is in the Corralitos – Pajaro Valley (3-002.01) groundwater basin, which is designated as a high (Critically Overdraft) groundwater basin. As stipulated in the North County LUP, future development on Opportunity Site 48 would be required to demonstrate adequate water supply to meet long-term needs. Section 4.18, Utilities and Service Systems, discusses water supply and identifies mitigation measures to ensure that development does not occur unless a proof is provided demonstrating the availability of a long-term sustainable water supply and adequate water supply system. Therefore, the project is consistent with the North County LUP policies. Furthermore, the proposed project requires policy amendment to resolve inconsistencies in implementing HEU6. As indicated earlier in Section 4.11.3, the HEU6 need not be in perfect conformity with every individual policy, and a conflict with a specific policy does not automatically constitute a significant environmental impact unless it results in a direct physical effect on the environment.

As discussed throughout this PEIR, future development facilitated by the project would be subject to applicable environmental regulations, including but not limited to the County Code, environmental protective policies in the North County LUP (Coastal) and Carmel Area LUP CIPs, and mitigation measures (including but not limited to measures prescribed in the by-right housing ordinance that includes objective design standards) identified in this PEIR to reduce environmental impacts.

The project would result development of housing units more than the currently allowed under the LUP policies, therefore would result in greater environmental impacts than would otherwise occur without the project. These environmental impacts are discussed throughout this PEIR, including

significant and unavoidable impacts with respect to aesthetics, agricultural and forestry resources, air quality, biological resources, greenhouse gas emissions, hydrology and water quality (groundwater recharge and supply) transportation (vehicle miles traveled), and utilities and service systems (water supply and infrastructure). Therefore, although the project would not create a policy conflict that is itself significant upon adoption, the resulting environmental impacts are significant and unavoidable. Accordingly, the land use impact is determined to be significant and unavoidable.

### Growth Management Policy

The Growth Management Policy requires the General Plan to incorporate managed growth and to include appropriate growth areas within the UMC. Consistent with this policy, the 2010 General Plan designated Community Areas, Rural Centers, and Affordable Housing Overlay districts as top priority areas for development. The project would amend various Area Plans, Master Plans, LUPs, and Community Area Plan policies to include the opportunity sites as priority development areas. Accordingly, upon approval, the project would be consistent with the County's Growth Management Policy.

### Monterey Regional Airport Land Use Plan

Opportunity Sites 46, 47, and 52 are located within the AIA of the Monterey Regional ALUCP. Pursuant to Section 4.1.8.1 of the ALUCP, proposed land use actions affecting property within the AIA must be referred to the ALUC for a consistency determination with the applicable compatibility policies of the ALUCP. The Monterey Regional ALUCP includes safety compatibility criteria intended to minimize risks to people and property associated with aircraft operations, including restrictions on land uses that could expose concentrations of people or vulnerable populations to elevated aircraft accident risk. Accordingly, the ALUCP constitutes a land use plan adopted for the purpose of avoiding or mitigating environmental and public safety impacts associated with airport operations.

The Monterey Regional ALUCP establishes seven airport safety zones (Zones 1 through 7) with varying development restrictions based on aircraft accident exposure. A portion of Opportunity Site 46 is located within Safety Zone 4 – Outer Approach/Departure Zone (OADZ), while the remainder of Site 46 and all of Opportunity Sites 47 and 52 are located within Safety Zone 7 (AIA). The OADZ encompasses areas along the extended runway centerline beyond the Inner Approach/Departure Zone and is considered to have a moderate aircraft accident risk level. Within Safety Zone 4, residential development is limited to one dwelling unit per two acres, and additional requirements apply, including airport disclosure notices and airspace review for structures exceeding 70 feet in height. Safety Zone 7 represents areas with comparatively low aircraft accident risk and allows residential uses subject to compliance with applicable compatibility standards, including airport disclosure requirements, airspace review for structures exceeding 100 feet in height, restrictions

related to Federal Aviation Administration (FAA) Part 77 airspace surfaces, and ALUC review for uses involving vulnerable occupants within specified distances from runways.

The HEU6 incorporates measures specifically intended to ensure consistency with the Monterey Regional ALUCP and avoid conflicts with airport safety and compatibility policies. Program H-3.C, Zoning Ordinance Amendments for Opportunity Sites, requires the County to amend zoning designations and establish detailed overlay boundaries for airport influence and safety zones using the ALUCP influence zones, FAA Part 77 surfaces, and topographic data. Consistent with Program H-3.C, Opportunity Site 46 would be split-zoned such that the portion within Safety Zone 4 would remain designated Public/Quasi-Public, while only the portion within Safety Zone 7 would be redesignated to HDR/30. Similarly, Opportunity Site 47 would be split-zoned between HDR/30 and Public/Quasi-Public to ensure consistency with airport compatibility requirements, including, but not limited to height restrictions. Furthermore, Opportunity Sites 31 and 53 are within two miles of the Marina Municipal Airport, and Opportunity Sites 46, 47, and 52 are within two miles of the Monterey Regional Airport. As discussed in Section 4.13, Noise, Threshold 3, Aircraft Noise, Opportunity Sites 31 and 53 are outside the outermost noise contour of 55 CNEL and Opportunity Sites 46, 47, and 53 are outside the outermost noise contour of 65 CNEL. Because 65 CNEL is the County's acceptable ambient noise levels for multi-family residential uses, noise-related airport compatibility impact would not occur. Although Opportunity Site 52 would also include split zoning between HDR/30 and Resource Conservation (RC), that zoning configuration is unrelated to airport safety constraints. Airport land use compatibility is further discussed in Section 4.9, Hazards and Hazardous Materials, Threshold 5, Airport Land Use Compatibility. Future development on these sites would remain subject to ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions.

The HEU6 incorporates zoning limitations and implementation measures specifically intended to maintain consistency with the Monterey Regional ALUCP, and future development would remain subject to ALUC review and applicable airport compatibility requirements. Therefore, implementation of the HEU6 would not conflict with the Monterey Regional ALUCP.

### Marina Municipal Airport Land Use Plan

Opportunity Sites 31 and 53 are located within the Marina Municipal Airport ALUCP and are designated within Safety Zone 7 (AIA). Similar to the Monterey Regional ALUCP, the Marina Municipal Airport ALUCP establishes airport compatibility and safety standards intended to reduce risks associated with aircraft operations and protect public safety. Safety Zone 7 permits residential and other urban development subject to compliance with applicable airport compatibility requirements, including airport disclosure notices, FAA airspace review, and restrictions related to airspace obstructions and hazards to flight.

Unlike Opportunity Site 46 within the Monterey Regional ALUCP, Opportunity Sites 31 and 53 are not located within a higher-risk Safety Zone that restricts residential density or prohibits residential uses. Accordingly, no split zoning or additional land use limitations are required to maintain consistency with the Marina Municipal Airport ALUCP. Future development within these sites would nevertheless remain subject to applicable airport compatibility review procedures and compliance with FAA and ALUC requirements.

The proposed land use designations would not introduce incompatible uses within airport safety zones and future development on these opportunity sites would remain subject to applicable airport compatibility standards and review procedures. Therefore, implementation of the HEU6 would not conflict with the Marina Municipal Airport ALUCP.

## Monterey County Code

The project includes amendments to the Monterey County Zoning Code (Coastal and Inland) and other County Code provisions to implement the HEU6, including but not limited to amending the HDR designation to increase density to allow 25 dwelling units per acre and 30 dwelling units per acre. Future development projects would be required to comply with the amended HDR/25 and HDR/30 zoning provisions. Adoption of the by-right housing ordinance would also occur concurrently with the project.

Although amendments to the County Code would occur, upon adoption of the amended Monterey County Code provisions, the project would be consistent with the County Code.

### *Montrey County CIP – Regulations for Development in the North County Land Use Plan Area (Chapter 20.144)*

Section 20.144.140 provides general and specific land use and development standards for development in the North County LUP (Coastal) area. General standards require availability of adequate sewer, water, and transportation services prior to the application being determined complete. It also requires appropriate soils, hydrologic, and/or traffic studies to be prepared prior to the application being determined complete (Section 20.144.140.A.1). Future development project would be required to comply with this CIP requirement, as amended to implement the HEU6.

Section 20.144.140.B.3.a (buildout) indicates that a total of 2,043 new lots or units may be created after certification of the LUP in June 1982. This figure represents development at a level of 50 percent of the buildout remaining at the time of LUP certification.

Section 20.144.140.B.3.d (subdivision) indicates that densities of residential subdivisions shall be based on an evaluation of the site conditions and the development's cumulative impacts. As such, the maximum allowable density based on the evaluation shall be determined pursuant to Section 20.140.070. Factors to be considered include: geologic/flood/fire hazards, slope, vegetation,

environmentally sensitive habitats, water quality and availability, erosion, septic tank suitability, adjacent land use compatibility, public services availability, and coastal access and visual resource opportunities and constraints. This CIP section implements the North County LUP Policy 4.3.6.D.1.

#### *Monterey County CIP – Regulations for Development in the Carmel Area Land Use Plan Area (Chapter 20.146)*

Section 20.146.120 Land Use and Development Standards indicate that the intent of this standards are to insure all future development within the Carmel Coastal Segment be consistent with and subordinate to the priority of protecting the areas scenic beauty and natural resource values. General development standards are provided for undeveloped parcels south of the Carmel River (Section 20.146.120.A.1). Opportunity Sites 16 and 43 are located north of Carmel River, and would not be subject to this section. Section 20.146.120.A.3 stipulates that only land uses of a character, scale or level consistent with the goal of preserving the coasts natural beauty and tranquility will be permitted in the Carmel area, and it lists types of uses considered inappropriate to the Carmel area. High-density residential uses are not on the list of inappropriate types of uses, as Carmel Area LUP only includes two types of residential uses in its map, Residential – Low Density and Residential – Medium Density. Section 20.146.120.A.6 requires all areas of a parcel in slopes of 30 percent and greater to be placed in a scenic easement as a condition of development approval. Section 20.146.120.B.4, Specific Development Standards for Residential would require code amendments to include high-density residential development, as it currently does not include any provisions pertaining to high-density residential uses. Opportunity Sites 16 and 43 include portions of the site with slope greater than 25 percent and may include portions with slopes greater than 30 percent. Therefore, the proposed high-density residential use on slopes greater than 25 percent may not be consistent. However, the inconsistencies would be resolved once the project is approved and amendments are adopted.

Section 20.146.030, Visual Resources Development Standards, provides standards to determine whether the project is within the public viewshed; requirements for undergrounding utilities; and other various general and specific development standards. Visual resources related CIP provisions are discussed in detail in Section 4.1, Aesthetics, and the project would comply with these provisions as appropriate.

Section 20.146.040, Environmentally Sensitive Habitats Development Standards, requires that all development prepare a biological survey. It also provides requirements for content of the biological report, and how the development are to proceed if environmentally sensitive habitat areas are found. Biological resources related CIP provisions are discussed in detail in Section 4.4, Biological Resources, and the project would comply with these provisions as applicable.

Section 20.146.060, Forest Resources Development Standards, requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forest Management Plan is required for tree removal requiring a coastal development permit or for development requiring a coastal development permit where the development includes native tree removal of size or amount. Section 20.146.060(D) provides specific development standards for tree removal activities. The project would comply with these provisions as applicable.

### Senate Bill 244

SB 244 (CGC Sections 65302.10 and 56430) requires counties to identify DUCs and consider their infrastructure and service needs, including drinking water, wastewater, storm drainage, and fire protection, in General Plan planning. Consistent with SB 244, the HEU6 includes Implementation Program Goal H-2, which requires the County to conduct an SB 244 analysis by the end of 2027. The analysis will identify DUCs within UMC, evaluate infrastructure and service needs, and inform future planning efforts to improve access to essential public facilities and services. Therefore, the project would not remove or conflict with any existing policies implementing SB 244 or otherwise impede the provision of infrastructure and municipal services to DUCs. Instead, residential development facilitated by the HEU6 could support the extension or improvement of public infrastructure and services where appropriate and consistent with adopted infrastructure and utility plans. Furthermore, future development projects would be required to demonstrate the availability of adequate public services and obtain all applicable utility and infrastructure approvals prior to development. Accordingly, the HEU6 would not conflict with the objectives or implementation of SB 244.

### Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy

As required by SB 375, AMBAG develops a SCS every 4 years as part of updating its MTP. The AMBAG MTP/SCS outlines a regional approach to reducing vehicle miles traveled (VMT). As shown in Table 4.11-2, Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy Consistency Analysis, the HEU6 is consistent with the goals of the 2045 MTP/SCS, and no conflict would occur that could cause significant environmental impacts. Refer to Section 4.16, Transportation, for general consistency analysis related to VMT impacts and consistency with other plans related to transportation planning.

**Table 4.11-2. Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| Access and Mobility – Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region. | **Consistent:** The HEU6 allows high-density housing to be developed in areas where there are already roadways and where bikeways and transit are available within 0.5 mile radius for the majority of the opportunity sites. As discussed |

**Table 4.11-2. Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| | in Section 4.16, Transportation, the 51 of the 56 opportunity sites are within 0.5 mile of existing transit stops and 53 of the 56 opportunity sites are located within 0.5 mile of existing or proposed bicycle facilities. The project would not obstruct the construction or operation of roadway, transit, or bicycle facilities in a manner that would conflict with this policy. Additionally, the project would not obstruct, alter, or delay the construction or operation of any planned roadway, transit, or bicycle facilities in a manner that would conflict with AMBAG's 2045 MTP/SCS Goal of Access and Mobility. Instead, by placing higher-density housing and diverse housing options within a 0.5 mile buffer area of existing facilities, the project would be building localized ridership base necessary to maximize transit productivity over time. The project would also address job-housing imbalance, enabling residents to live in close proximity to where they work, thereby reducing vehicle miles traveled, and maximizing productivity. |
| Economic Vitality – Raise the region's standard of living by enhancing the performance of the transportation system. | **Consistent.** The HEU6 facilitates the production of a diverse housing supply, which is critical to maintaining a stable regional workforce and enhancing the overall performance of the transportation system through reduced long-distance commuting. |
| Environment – Promote environmental sustainability and protect the natural environment. | **Consistent:** The project encourages infill development, higher-density residential and "by-right" housing. This creates efficient development patterns that protect the natural environment from urban sprawl, optimizes housing and employment choices. As discussed in Section 4.4, Biological Resources, implementation of the project would not significantly impact biological resources with mitigation, and as discussed in Section 4.8, Greenhouse Gas Emissions, and the project would comply with CALGreen standards and other applicable County development code requirements that promote environmental sustainability. Furthermore, providing high-density housing aligns with supporting low-VMT development patterns, assisting in GHG emissions reductions. |
| Healthy Communities – Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation. | **Consistent:** Allowing development of additional housing that complies with County development code requirements would not create negative health outcomes for County residents. The opportunity sites were selected after considering various factors which included surrounding development and availability of infrastructure, including roadways, bikeways, and transit, surrounding land uses, and nearby amenities. Providing housing at different income levels would allow employers to attract and retain local workforce and promote a healthy economy, improving employment choices for County residents. Also see above consistency analysis under "Environment." |

**Table 4.11-2. Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy Consistency Analysis**

| Goals | Consistency Analysis |
|---|---|
| Social Equity – Provide an equitable level of transportation services to all segments of the population. | **Consistent.** The distribution of high-density housing sites across different areas of the County supports social equity by enabling housing opportunities in a variety of communities across various income levels, rather than concentrating affordable housing in a limited number of locations. Part of the County's site selection strategy included a review of site locations to ensure that opportunity sites would assist the County's goals of Affirmative Furthering Fair Housing, as required by state law. Although some new high-density sites may not be located immediately adjacent to transit or bikeways, the overall increase in housing supply can help reduce demand pressures and improve availability of units near existing transportation infrastructure. As a result, the proposed distribution of opportunity sites does not conflict with the objective of providing equitable access to transportation services. |
| System Preservation and Safety – Preserve and ensure a sustainable and safe regional transportation system. | **Consistent**: The project allows housing development in multiple geographic areas where existing roadway system exists. By focusing growth within established community boundaries, the HEU6 minimizes the need for costly and environmentally disruptive infrastructure expansion, ensuring a more sustainable regional system. |

The HEU6 is consistent with the AMBAG 2045 MTP/SCS. It serves as a localized implementation tool for the regional SCS by aligning the County's housing sites with the MTP/SCS's growth forecast and environmental sustainability mandates. Therefore, the project does not conflict with the regional plan, and impacts are less than significant.

### Significance of Impact

Potentially significant.

### Mitigation Measures

No mitigation measures are feasible.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

## 4.11.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to land use and planning that could result from implementation of the project.

### 4.11.6.1 Cumulative Threshold 1: Physical Division of Established Community

Cumulative impact setting for the project would be projections-based approach, which include the assigned RHNA allocations for the AMBAG region for the Sixth Cycle as state in Table 4-1, RHNA for the AMBAG Region (June 30, 2023–December 15, 2031). As discussed in Section 4.11.5.1, the HEU6 would not individually divide an established community because it would not involve construction of new freeways, major roadway expansions, roadway closures, or other physical infrastructure that would create barriers between neighborhoods or disrupt existing circulation patterns. Development associated with the HEU6 would occur primarily on infill, vacant, underutilized, or transitionally zoned parcels within existing developed areas already served by infrastructure and transportation networks, therefore, no major infrastructure that would physically divide existing community is anticipated. Similarly, cumulative development projects would also involve similar residential projects to accommodate their assigned RHNA targets and provide new roads, private yards, common open space, and other physical barriers such as fences and gates, but would not bisect established communities. Therefore, implementation of the HEU6, together with other cumulative development in the AMBAG region, would not substantially contribute to physically dividing an established community, and cumulative impacts would be less than cumulatively considerable.

#### Significance of Impact

Less than significant impact.

#### Mitigation Measures

No mitigation measures are required.

#### Significance of Impact After Mitigation

Less than significant impact.

### 4.11.6.2 Cumulative Threshold 2: Conflict with Applicable Land Use Plans, Policies, and Regulations

The HEU6 is a program-level, Countywide planning document designed to meet RHNA targets. As discussed in Chapter 4, the geographic scope of cumulative analysis varies by resource area. For land use impact analysis, the cumulative impact analysis setting would be projections-based approach, which include the assigned RHNA allocations for the AMBAG region for the Sixth Cycle as state in Table 4-1. It accounts for the total reasonably foreseeable housing buildout within the UMC as well as other jurisdictions in the AMBAG region through the planning horizon. This cumulative analysis evaluates the combined regional effects of future housing development facilitated under the amended land use designations, zoning, and implementation programs across the AMBAG region.

Under CEQA, a conflict with an applicable land use policy or regulation does not, by itself, constitute a significant environmental impact. A significant impact occurs only if a project conflicts with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect, and that conflict results in a clear, adverse physical change to the environment. Implementation of the HEU6, together with other cumulative development in AMBAG region, could result in localized inconsistencies with certain existing land use policies or development standards as densities increase. However, as analyzed throughout this PEIR, where cumulative housing development results in significant physical environmental effects, those physical impacts are addressed directly within their respective resource sections.

The County's adopted plans include development caps intended to protect localized environmental resources, specifically with regard to groundwater basin sustainability and water supply, scenic and visual resources, and resources protected under a prior settlement agreement.

To accommodate the assigned RHNA targets, HEU6 would exempt the opportunity sites from these caps, creating a direct conflict with these environmentally protective planning constraints. As fully analyzed in Section 4.1, Aesthetics; Section 4.10, Hydrology and Water Quality; Section 4.16, Transportation; and Section 4.18, Utilities and Service Systems, even with application of the County's Objective Development Standards and the programmatic mitigation measures identified in this PEIR, the physical impacts resulting from removal of these resource-protective caps remain significant and unavoidable. Although adoption of the amendments would resolve the policy conflict itself, the amendments directly facilitate these unmitigable physical changes. Accordingly, the project's contribution to cumulative land use conflicts is cumulatively considerable, and the impact is significant and unavoidable.

### Significance of Impact

Potentially significant.

### Mitigation Measures

No mitigation measures are feasible.

### Significance of Impact After Mitigation

Significant and unavoidable impact.

## 4.11.7 Conclusion

The project would result in significant and unavoidable land use and planning impacts. While the policy conflicts themselves would be resolved upon adoption of the amendments, the project cannot be accommodated without exceeding the caps established to protect the environment. Because the associated groundwater and water supply impacts have been found significant and

unavoidable, the related land use impacts have also been determined to be significant and unavoidable.

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# 4.12 Mineral Resources

This section evaluates the potential for impacts related to mineral resources resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.12.1 Regulatory Setting

This section describes the state and local regulatory framework adopted to address mineral resources. There are no federal regulations related to mineral resources that apply to the project.

### 4.12.1.1 State

#### SMARA and the Mineral Land Classification Program

Enacted in 1975, the Surface Mining and Reclamation Act of 1975 (SMARA), as amended (California Public Resources Code [PRC], Section 2710 et seq.), is the primary regulatory framework for mining in California; it governs the regulation and reclamation of surface mining operations and ensures that mineral resources of statewide and regional significance are identified and managed appropriately. SMARA directs the state geologist, operating in the California Department of Conservation (DOC) California Geological Survey, to inventory and classify the state's nonfuel mineral resources to assist in long-term land use planning.

Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at identified sites and to incorporate mineral resource management policies into their general plans.

Under SMARA (PRC Section 2719), "minerals" include naturally occurring chemical elements and compounds formed through inorganic or organic processes. This definition encompasses substances such as coal, peat, and bituminous rock, but excludes geothermal resources, natural gas, and petroleum.

The Mineral Land Classification Program was developed to identify lands with significant mineral value, especially in regions subject to urbanization. As part of this program, Production-Consumption (P-C) Regions are delineated based on areas of active aggregate production and their corresponding market areas. These regions are analyzed for the quantity and quality of aggregate resources, supporting estimates of regional demand over a 50-year planning horizon.

Mineral land classification under SMARA uses a standardized classification system for Mineral Resource Zones (MRZs):

- **MRZ-1:** Areas where adequate information indicates no significant mineral resources are present.
- **MRZ-2:** Areas where adequate information indicates that significant mineral resources are present or likely to be present; land use should be managed accordingly.
- **MRZ-3:** Areas where the significance of mineral resources cannot be evaluated due to limited data.
- **MRZ-4:** Areas with insufficient information to assign to any other MRZ category.

Additionally, Scientific Resource Zones may be designated in areas containing rare or unique geologic features or mineral occurrences of exceptional scientific importance.

Monterey County is part of the Monterey Bay P-C Region along with the Counties of Santa Cruz, Santa Clara, and San Benito. An Update of the Mineral Land Classification for Construction Aggregate Resources in the Monterey Bay Production-Consumption Region was published by the DOC California Geological Survey in 2021. This report identifies and classifies new construction aggregate resources in the Monterey Bay P-C Region, estimates aggregate permitted reserves and unpermitted resources as of December 2017, and forecasts construction aggregate demand in the Monterey Bay P-C Region to 2068.

## Mineral Resources Program

The Mineral Resources Program of the DOC is implemented through two primary initiatives: the Mineral Resources Project and the Mineral Hazards Project. Together, these efforts provide comprehensive data on California's diverse nonfuel mineral resources—including metals and industrial minerals—as well as naturally occurring mineral hazards (such as asbestos, radon, and mercury), and both active and historical mining activities throughout the state.

### *Mineral Resources Project*

The DOC's Mineral Resources Project focuses on the identification, classification, and mapping of the state's nonfuel mineral resources, grouped into three primary categories:

- Metals: e.g., gold, silver, copper
- Industrial minerals: e.g., borates, rare earth elements, clays, limestone, gypsum, salt, dimension stone
- Construction aggregates: e.g., sand, gravel, and crushed stone

The Mineral Resources Project's primary mandate is to classify lands containing regionally significant mineral resources, in accordance with SMARA.

### *Mineral Hazards Project*

While the Mineral Resources Project focuses on beneficial mineral deposits, the Mineral Hazards Project addresses naturally occurring hazardous minerals. The Mineral Hazards Project evaluates the presence and potential exposure risks of substances such as asbestos, mercury, and radon in geologic materials, informing land use and public health decisions.

## Regulatory and Planning Integration

SMARA classification is intended to inform land use planning by cities, counties, and regional agencies. Local agencies are required to consider mineral resource classifications when developing or amending general plans (PRC Section 2762). The classification data are advisory but provide a scientific basis for conserving mineral resources essential to California's infrastructure, economy, and sustainability goals.

**PRC Section 2762:** Within 12 months of receiving the mineral information described in PRC Section 2761, and also within 12 months of the designation of an area of statewide or regional significance in its jurisdiction, a lead agency shall, in accordance with state policy, establish mineral resource management policies to be incorporated in its general plan. Before a lead agency can permit a use that would threaten the potential to extract minerals in MRZ-3 areas, an evaluation of the area may be required to identify the significance of the mineral deposits in the area.

**PRC Section 2763:** If an area is designated by the State Mining and Geology Board as an area of regional significance, and the lead agency either has designated that area in its general plan as having important minerals to be protected pursuant to subdivision (a) of Section 2762, or otherwise has not yet acted pursuant to subdivision (a) of Section 2762, then prior to permitting a use that would threaten the potential to extract minerals in that area, the lead agency shall prepare a statement specifying its reasons for permitting the proposed use, in accordance with the requirements set forth in subdivision (d) of Section 2762. SMARA requires that the County decision-makers consider this elimination of extraction potential in their land use decisions. The

Statement of Reasons shall list potential reasons to approve the project and to eliminate any potential for extraction of this resource. The Statement of Reasons must be submitted to the State Geologist and California State Mining and Geology Board for their review for a period of 60 days in conjunction with the environmental review of the project, if any.

#### 4.12.1.2 Local

### 2010 General Plan (Inland)

The Monterey County General Plan (2010 General Plan) includes the following policies aimed at conserving and managing mineral resources.

#### *Conservation and Open Space Element*

##### Mineral Resources

Goal OS-2 calls for the conservation, utilization, and development of Monterey County's mineral resources. Policy OS-2.1 calls for the protection of potentially significant mineral deposits and existing mining operations from on-site and off-site land uses that would be incompatible with mineral extraction activities. Policy OS-2.2 requires mineral extraction operations to be consistent with SMARA and other applicable standards and to furnish adequate financial security. Policy OS-2.3 supports efforts to conserve raw mineral resources through recycling. Policies OS-2.4 and OS-2.5 require the County to map lands containing known valuable mineral deposits and to inventory, assess, and characterize the location and condition of identified pre-SMARA mines to ensure they do not contribute to significant public health or safety risks.

### Area and Master Plans and Local Coastal Program – Land Use Plans

The Carmel Area Land Use Plan, Carmel Valley Master Plan, and Greater Monterey Peninsula Area Plan include supplemental policies that regulate specific mineral resource activities. However, these documents do not identify any specific policies or program pertaining to mineral resources that are applicable to the project. Applicable policies related to mineral resources from the Fort Ord Master Plan include the following:

#### *Fort Ord Master Plan*

##### Conservation Element

**Soils and Geology Objective B:** Provide for mineral extraction and reclamation activities consistent with the surrounding natural landscape, proposed future land uses, and soil conservation practices, provided, however, that drilling new oil and gas wells land uses in support of well stimulation treatments are prohibited in all land use designations in accordance with General Land Use Policy A-1.

Soils and Geology Policy B-1 and Programs B-1.1 and B-1.2, which support Policy B-1, require the County to identify areas of highly valuable mineral resources in the former Fort Ord, based on

the State of California Geological Survey's mineral resource "classification-designation" system, and provide for the protection of these areas.

### Monterey County Code

**Chapter 16.04: Surface Mining and Reclamation:** This Monterey County Code (County Code) chapter regulates surface mining operations in alignment with SMARA. It ensures the continued availability of important mineral resources while regulating surface mining operations to minimize environmental impacts. Key provisions include:

- **Permitting Requirements:** Operators must obtain a permit before initiating surface mining operations.
- **Reclamation Plans:** A reclamation plan must be approved to ensure that mined lands are restored to a usable condition post-mining.
- **Financial Assurances:** Operators are required to provide financial assurances to guarantee the completion of reclamation activities.
- **Annual Inspections:** The County conducts annual inspections to ensure compliance with approved reclamation plans and SMARA regulations.

These regulations are designed to balance mineral resource extraction with environmental protection and land use planning. The County is updating Chapter 16.04 to ensure its consistency with SMARA.

## 4.12.2 Environmental Setting

### Regional Setting

The State Mining and Geology Board has identified several areas in the Monterey Bay region, including Monterey County, as containing regionally significant construction aggregate resources. According to the Update of the Mineral Land Classification for Construction Aggregate Resources in the Monterey Bay Production-Consumption (P-C) Region (2021), aggregate refers to sand, gravel, and crushed stone. It is the number one nonfuel mineral commodity in California by value (DOC 2021a). Figure 4.12-1, Monterey Bay Production – Consumption Region Map for Monterey, shows the Mineral Resource Zone map for construction aggregate and mine operation locations in the Monterey Bay region. There are 219 million tons of permitted construction aggregate resources (reserves) in the Monterey Bay P-C Region, and approximately 1.1 billion tons of aggregate underlying it. As shown on Figure 4.12-1, there are 30 permitted construction aggregate mines in the Monterey Bay P-C Region, 10 of which are in Monterey County (DOC 2021b).

Figure 4.12-2, Active Mine Locations in Monterey County, shows an updated active mine location in Monterey County as of 2023. As shown, there are 19 active mines in Monterey County. None is either on or within proximity to the opportunity sites.

## Opportunity Sites

As shown on Figures 4.12-3a through 3i, Mineral Resource Zones, the following sites are identified in the SMARA standardized mineral resource zoning system:

- **MRZ-1:** 1 through 6, 11 through 15, 30, 41, 49 through 51, 64
- **MRZ-2:** 46 (portion), 47, 53
- **MRZ-3:** 17 through 22, 35, 37, 54
- **MRZ-4:** 16, 40, 43, 45, 46 (portion)

Table 4.12-1, Surface Mining and Reclamation Act Mapped Opportunity Sites, summarizes the 16 opportunity sites that are mapped with SMARA classifications, along with the current land uses on those sites. These 16 sites are in four planning areas:

- Nine opportunity sites (17 through 22, 35, 37, and 54) are in the Carmel Valley Master Plan area;
- Four sites (40, 45, 46, and 53) are in the Greater Monterey Peninsula Area Plan;
- Two sites (16 and 43) are in the Carmel Area Land Use Plan; and
- One site (47) is in the Fort Ord Master Plan.

**Table 4.12-1. Surface Mining and Reclamation Act Mapped Opportunity Sites**

| Sites | APN(s) | Plan Area | Planned Developable Acreage | Classification | Existing Zoning | Existing Use |
|---|---|---|---|---|---|---|
| 16 | 009-061-003 | CALUP | 3.23 | MRZ-4 | Residential – Medium Density | Abandoned convalescent home. |
| 17 | 009-562-015, 009-562-016, 009-562-002 | CVMP | 3.51 | MRZ-3 | Commercial | Vacant. |
| 18 | 015-021-026 | CVMP | 1.47 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Vacant portion of the parcel with one residential use on east side of the parcel. |
| 19 | 015-021-025 | CVMP | 1.45 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Vacant portion of a parcel with a residential unit on the eastern half of the parcel. |
| 20 | 015-021-015 | CVMP | 5.33 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Agricultural – Row crop. |
| 21 | 015-021-021 | CVMP | 2.82 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Agricultural – Row crop. |
| 22 | 015-021-004 | CVMP | 6.25 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Agricultural – Row crop. |

**Table 4.12-1. Surface Mining and Reclamation Act Mapped Opportunity Sites**

| Sites | APN(s) | Plan Area | Planned Developable Acreage | Classification | Existing Zoning | Existing Use |
|---|---|---|---|---|---|---|
| 35 | 015-012-072 | CVMP | 3.93 | MRZ-3 | Planned Commercial/ Public/Quasi-Public (Split Land Use) | Parking lot. |
| 37 | 015-021-003 | CVMP | 5.65 | MRZ-3 | Residential – Low Density 5–1 Acres/Unit | Two housing units in southwest corner of the property. |
| 40 | 008-151-002 | GMPAP | 26.78 | MRZ-4 | RDR/5.1-UR-D-S | Vacant. Located in the High Meadows neighborhood. Comprised of mixed conifer forest and oak woodland. |
| 43 | 009-111-005 | CALUP | 1.46 | MRZ-4 | MDR/2-D(CZ) | Low Density Residential – The site has a residential development in the southeast corner of the parcel along with ancillary structures. Parcel is owned by the Stevenson School, which is directly adjacent to the south. |
| 45 | 008-141-002, 008-141-014 | GMPAP | 2.97 | MRZ-4 | Public/Quasi-Public/ Residential – Rural Density 5 Acres+/Unit (2 Parcels) | Unitarian Universalist Church. |
| 46 | 173-071-008 | GMPAP | 9.19 | MRZ-2 and MRZ-4 | Public/Quasi-Public | Vacant portion of York School, a private education institution. No improvements except a baseball field at the northeast corner. |
| 47 | 031-131-006 | FOMP | 98.40 | MRZ-2 | Open Space Recreation (Fort Ord Master Plan) | Recreational sports fields (soccer field, football field, and track) and undeveloped areas. East of the Monterey Regional Airport, owned by York School. |
| 53 | 031-101-018 | GMPAP | 47.52 | MRZ-2 | C-R (Commercial/Multiple Family Residential) | Vacant. East of California State University Monterey Bay in the City of Marina. Note that this site is within the City of Marina city limits but is supported by the City. Owned by The Regents of the UC. |
| 54 | 015-012-070 | CVMP | 1.30 | MRZ-3 | VO-B-6-D-S-RAZ | Developed with bank/office space uses. |

**Notes:** CALUP = Carmel Area Land Use Plan; CVMP = Carmel Valley Master Plan; FOMP = Fort Ord Master Plan; GMPAP = Greater Monterey Peninsula Area Plan; MRZ = Mineral Resource Zone; UC = University of California

The County's 2010 General Plan and Local Coastal Program identify and reference the mineral resource classification system (Mineral Resource Zones) where potential mineral resources exist as identified by the California DOC. No other locally important or protected mineral resource sites have been identified.

## 4.12.3 Method of Analysis

The analysis is based on the available GIS MRZ data from the County and the California DOC, and applicable zoning and land use designations. MRZ classifications are used to identify the likelihood and significance of mineral resource deposits. Existing land uses, zoning constraints, and the absence of known mineral extraction activities inform the potential for resource recovery irrespective of project implementation.

Given that the thresholds of significance in this section are primarily based on the location, existing site and surrounding land uses, and soil conditions of each site rather than the number of housing units proposed (refer to Section 4.12.4, Thresholds of Significance), this section of the PEIR evaluates each of the opportunity site parcels to determine impacts on mineral resources.

## 4.12.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on mineral resources if it would:

- **Threshold 1:** Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- **Threshold 2:** Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

## 4.12.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to mineral resources that could result from implementation of the project.

### 4.12.5.1 Thresholds 1 and 2: Loss of Known Mineral Resources and Locally Important Mineral Resource Site

#### Impact Analysis

As summarized in Table 4.12-1, three opportunity sites—Opportunity Sites 46, 47, and 53—are mapped in MRZ-2, which denotes areas where adequate information indicates that significant mineral resources are present or likely present. However, there is no current mineral or oil production occurring on these sites. Further, as described for each of these sites below, due to the existing land uses and zoning designations of the sites and surrounding uses, as well as other constraints, none of these sites would be compatible with potential future mining operations.

Only a portion of Opportunity Site 46 lies within MRZ-2; the remainder is within MRZ-4. The entire parcel is owned by York School; it is developed as a school. No known mineral resource production is occurring on-site or in the surrounding area. Site 46 is zoned Public/Quasi-Public, which does not allow removal of minerals for commercial purposes without a use permit. The site is surrounded by existing commercial uses to the south and west, open space and recreational sports facilities to the north, and low-density residential uses to the west. Given the existing zoning designations and land uses of the site and surrounding areas, mineral extraction operations would be incompatible with existing uses at Opportunity Site 46. Therefore, it is unlikely that Opportunity Site 46 would be used for mineral resource production, even absent project implementation.

Opportunity Site 47 is also owned by York School. A portion of the site is developed with recreational sports facilities, including a soccer field, football field, and track. As with Opportunity Site 46, this site is zoned Public/Quasi-Public. No known mineral resource production is occurring either on site or in the surrounding area. This site is in the Fort Ord Master Plan area. The Conservation Element of the Fort Ord Master Plan includes a policy and associated program requiring the identification and protection of highly valuable mineral resources. However, Opportunity Site 47 has not been identified as warranting such protection. Opportunity Site 47 is surrounded by open space to the north, commercial uses to the southwest, York School to the south, and low-density residential uses to the southeast. Considering the current ownership of Opportunity Site 47, as well as existing uses of the site and surrounding areas, mineral extraction operations would be incompatible with existing uses at Opportunity Site 47. Therefore, it is unlikely that this site would be used for mineral resource production, even without project implementation.

Opportunity Site 53, adjacent to California State University, Monterey Bay, is currently undeveloped. It is owned by The Regents of the University of California. It lies within the City of Marina and is zoned C-R (Commercial/Multiple Family Residential). The C-R zoning designation does not allow for mineral extraction operations. Therefore, Opportunity Site 53 would not be used for mineral resource production, even absent project implementation.

Opportunity Sites 17 through 22, 35, 37, and 54 are mapped in MRZ-3, which denotes areas where the significance of mineral resources cannot be evaluated due to limited data. Opportunity Sites 16, 40, 43, 45, and a portion of 46 are mapped in MRZ-4, which includes areas where there is insufficient information to assign a more definitive classification. As shown in Table 4.12-1, these sites are zoned for residential, commercial, public/quasi-public, or office uses. These sites are either currently developed with non-mining-related uses or vacant but surrounded by such uses. Mineral resource production is not permitted under the current zoning designations. Therefore, it is unlikely that any of these sites would be used for mineral resource production, even without project implementation.

None of the opportunity sites are identified as existing mining operations by the State Division of Mines and Geology. Project implementation would not result in land use conflicts with existing or planned mineral extraction activities. Given that the project would permit the development of high-density residential uses on lands designated MRZ-2, MRZ-3, and MRZ-4, the County is required to prepare a Statement of Reasons with potential reasons to approve the project and eliminate the potential for extraction of the mineral resource(s), in accordance with PRC Sections 2762 and 2763. State law requires the County to submit the Statement of Reasons to the State Geologist and California State Mining and Geology Board for their review in conjunction with the environmental review of the project. This Statement of Reasons is included as a discretionary action as part of the project. Therefore, the project would comply with the provisions of PRC Sections 2762 and 2763.

Further, as described above, mineral resource production is not permitted under the current zoning designations at any of the opportunity sites. All opportunity sites are either currently developed with non-mining-related uses or vacant but surrounded by such uses. Therefore, it is unlikely that any of these sites would be used for mineral resource production, even without project implementation. As such, the project would neither result in the loss of availability of a known mineral resource of regional or statewide value, nor convert any locally important mineral resource recovery site identified in the 2010 General Plan or other applicable land use plans. Therefore, impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.12.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to mineral resources that could result from implementation of the project.

### 4.12.6.1 Cumulative Thresholds 1 and 2: Loss of Known Mineral Resources and Locally Important Mineral Resource Site

The cumulative setting for mineral resources considers the potential for additional development in both incorporated and unincorporated areas of Monterey County in the Monterey Bay P-C Region, particularly in areas designated as MRZs by the California Geological Survey. Specifically, MRZ-2 areas are known or likely to contain significant mineral resources, whereas MRZ-3 and MRZ-4 areas

have limited or insufficient data regarding mineral resource potential. Several areas in Monterey County are identified as MRZ-2, MRZ-3, or MRZ-4, where development could result in the loss of access to known or potentially valuable mineral resources at the regional or local level.

However, as discussed in the project-level analysis above, the opportunity sites proposed for rezoning to high-density residential use are in areas with no current mineral extraction activity—either on site or in the surrounding vicinity—and where existing ownership and zoning does not support mineral production. Similarly, it is anticipated that other future projects in Monterey County would also likely be in areas where land use designations, ownership, and surrounding development patterns do not support mineral extraction, even absent the project. As with the proposed project, future development in areas identified as MRZ-2, MRZ-3, or MRZ-4 would require the lead agency to prepare a Statement of Reasons specifying its reasons for permitting the proposed use and to forward a copy to the State Geologist and California State Mining and Geology Board for review, in accordance with PRC Sections 2762 and 2763.

While cumulative development in Monterey County could incrementally reduce the availability of land potentially suitable for future mineral resource extraction, no known mineral resource recovery sites would be affected by the project or by reasonably foreseeable development in the area.

Given the limited extent of mapped MRZ-2 in the opportunity sites, the absence of existing or planned mineral extraction in these areas, and the zoning and land use constraints that preclude such activity, the project's contribution to cumulative impacts on mineral resources would not be significant. Furthermore, other projects would be subject to independent CEQA review, including analysis of impacts on MRZ areas and mining sites. Therefore, cumulative impacts related to the loss or impediment of access to mineral resources would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

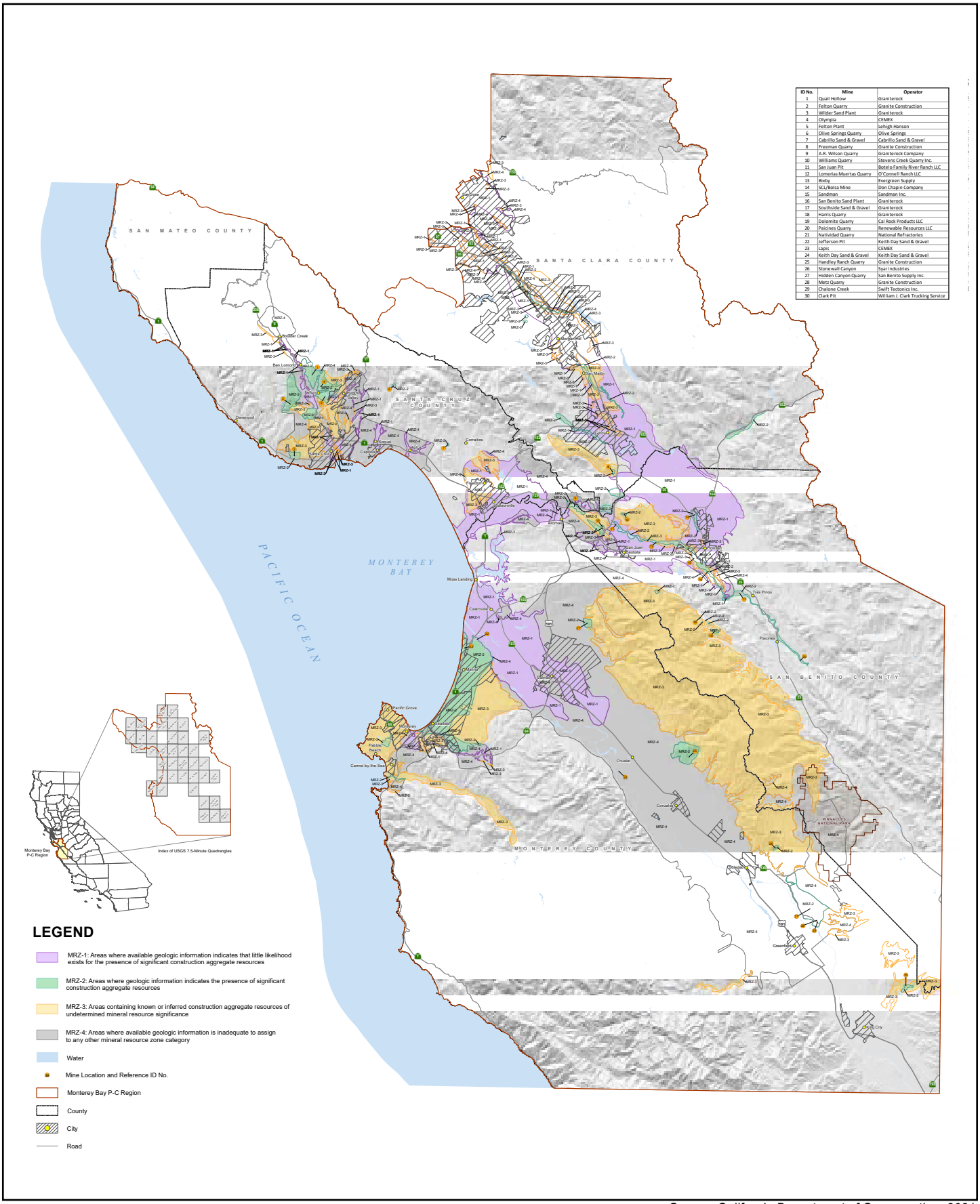
### Significance of Impact After Mitigation

Less than significant impact.

## 4.12.7 Conclusion

Implementation of the project would result in less than significant impacts on mineral resources with the preparation of a Statement of Reasons.

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| ID No. | Mine | Operator |
|---|---|---|
| 1 | Quail Hollow | Graniterock |
| 2 | Felton Quarry | Granite Construction |
| 3 | Wilder Sand Plant | Graniterock |
| 4 | Olympia | CEMEX |
| 5 | Felton Plant | Lehigh Hanson |
| 6 | Olive Springs Quarry | Olive Springs |
| 7 | Cabrillo Sand & Gravel | Cabrillo Sand & Gravel |
| 8 | Freeman Quarry | Granite Construction |
| 9 | A.R. Wilson Quarry | Graniterock Company |
| 10 | Williams Quarry | Stevens Creek Quarry Inc. |
| 11 | San Juan Pit | Botelo Family River Ranch LLC |
| 12 | Lomerias Muertas Quarry | O'Connell Ranch LLC |
| 13 | Bixby | Evergreen Supply |
| 14 | SCL/Bolsa Mine | Don Chapin Company |
| 15 | Sandman | Sandman Inc. |
| 16 | San Benito Sand Plant | Graniterock |
| 17 | Southside Sand & Gravel | Graniterock |
| 18 | Harris Quarry | Graniterock |
| 19 | Dolomite Quarry | Cal Rock Products LLC |
| 20 | Paicines Quarry | Renewable Resources LLC |
| 21 | Natividad Quarry | National Refractories |
| 22 | Jefferson Pit | Keith Day Sand & Gravel |
| 23 | Lapis | CEMEX |
| 24 | Keith Day Sand & Gravel | Keith Day Sand & Gravel |
| 25 | Handley Ranch Quarry | Granite Construction |
| 26 | Stonewall Canyon | Syar Industries |
| 27 | Hidden Canyon Quarry | San Benito Supply Inc. |
| 28 | Metz Quarry | Granite Construction |
| 29 | Chalone Creek | Swift Tectonics Inc. |
| 30 | Clark Pit | William J. Clark Trucking Service |

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*Source: California Department of Conservation, 2021.*

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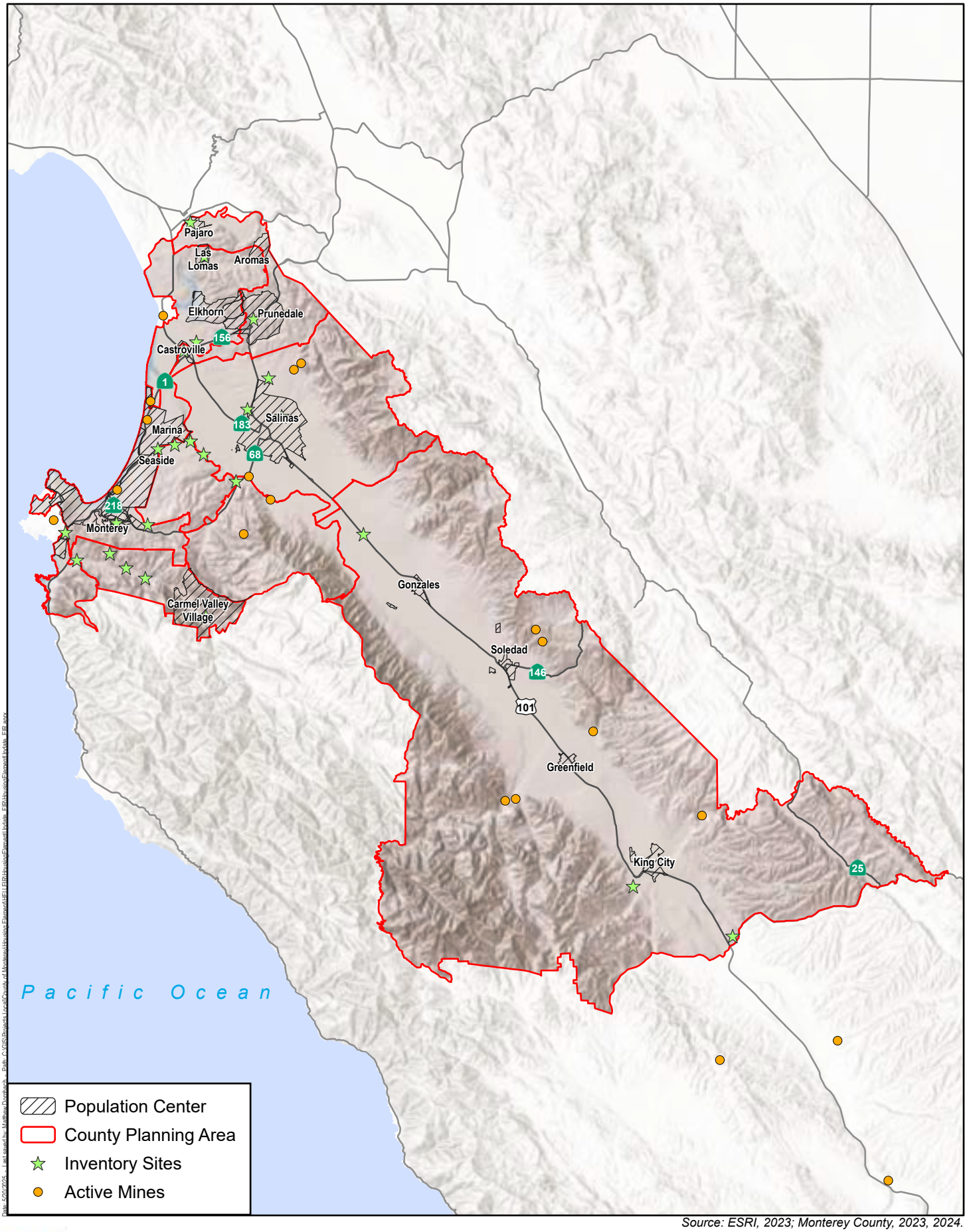
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# Figure 4.12-1

Monterey Bay Production -Consumption Region Map for Monterey

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: ESRI, 2023; Monterey County, 2023, 2024.*

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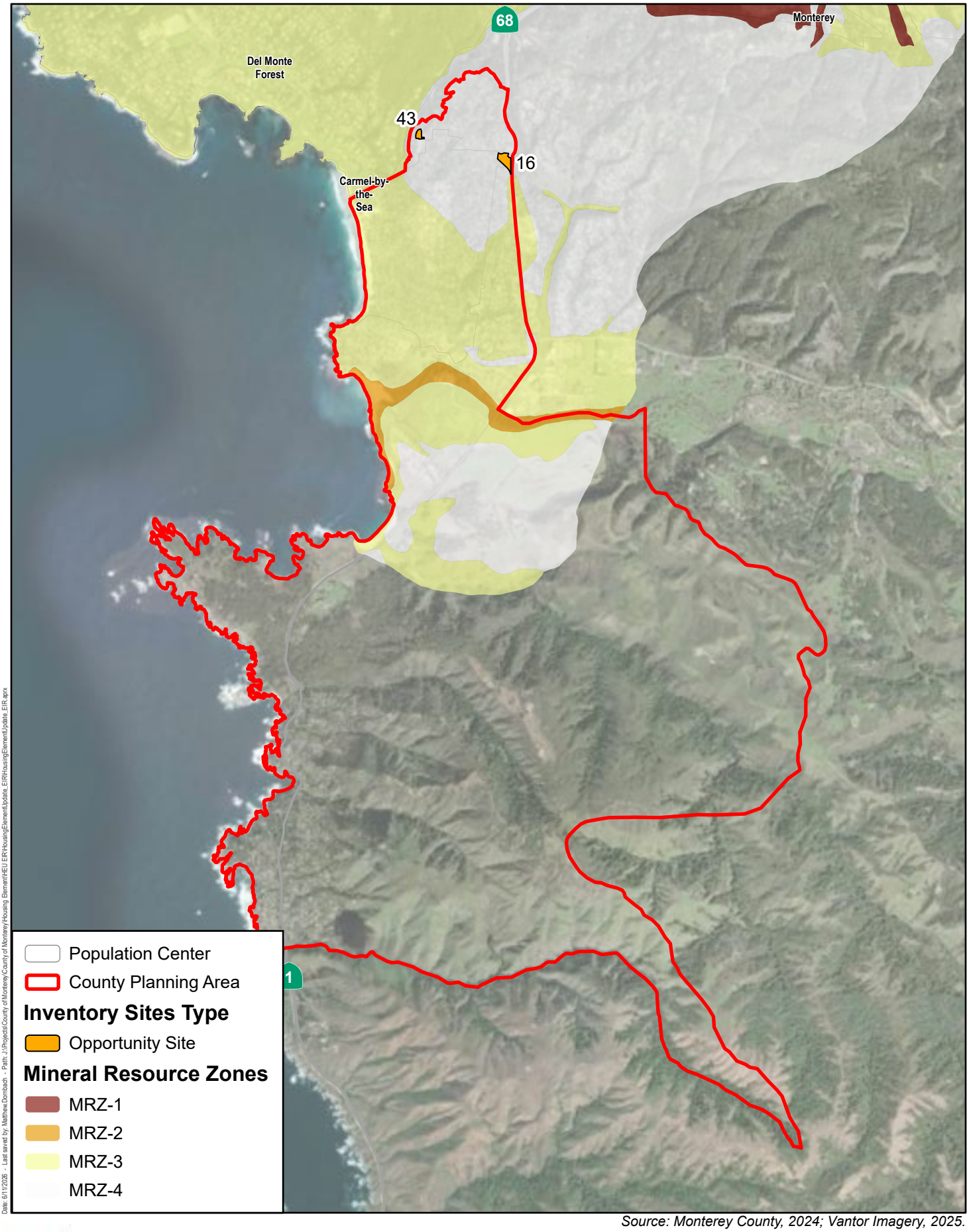
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**Figure 4.12-2**

Active Mine Locations in Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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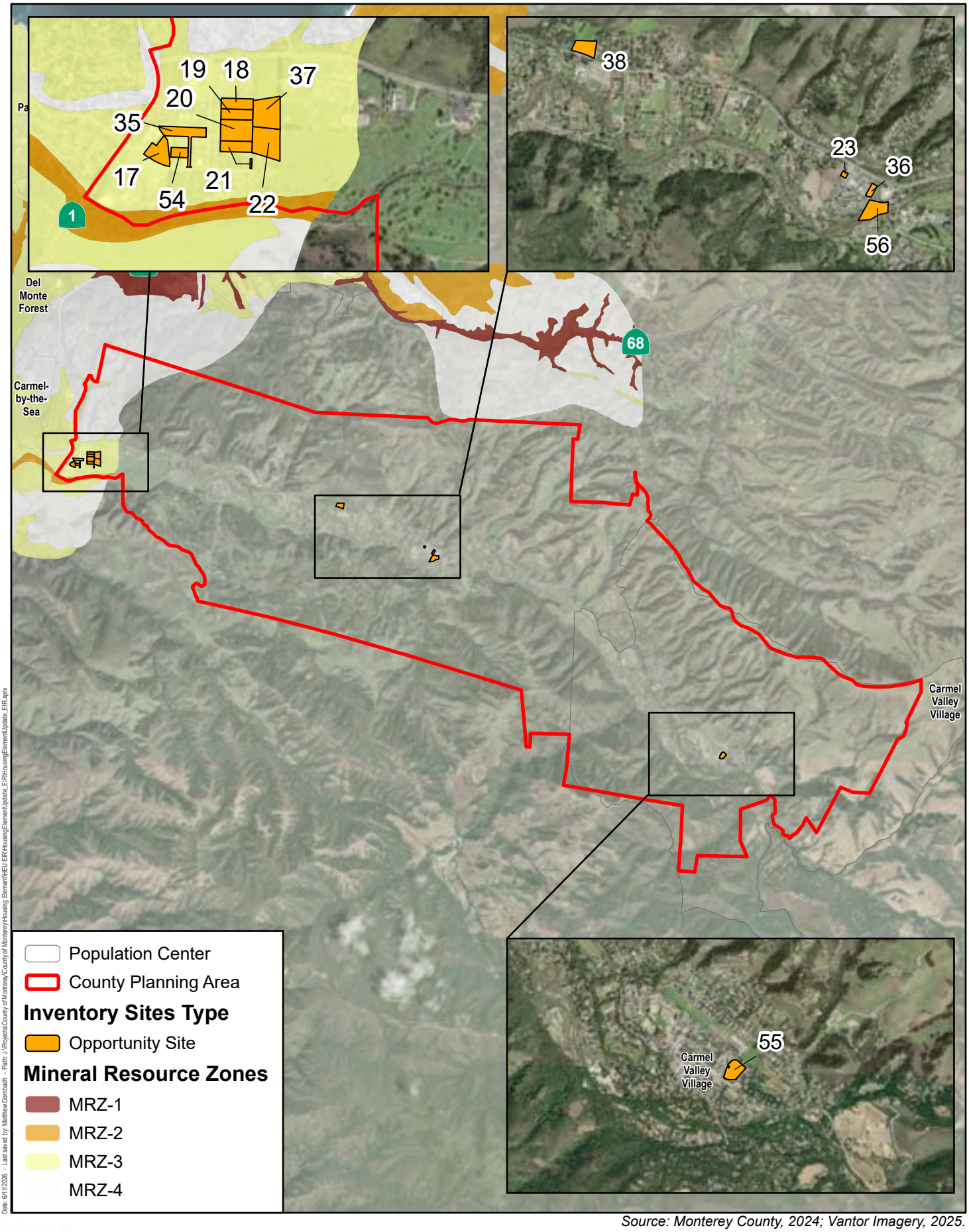
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**Figure 4.12-3a**

Mineral Resource Zones - Carmel Area Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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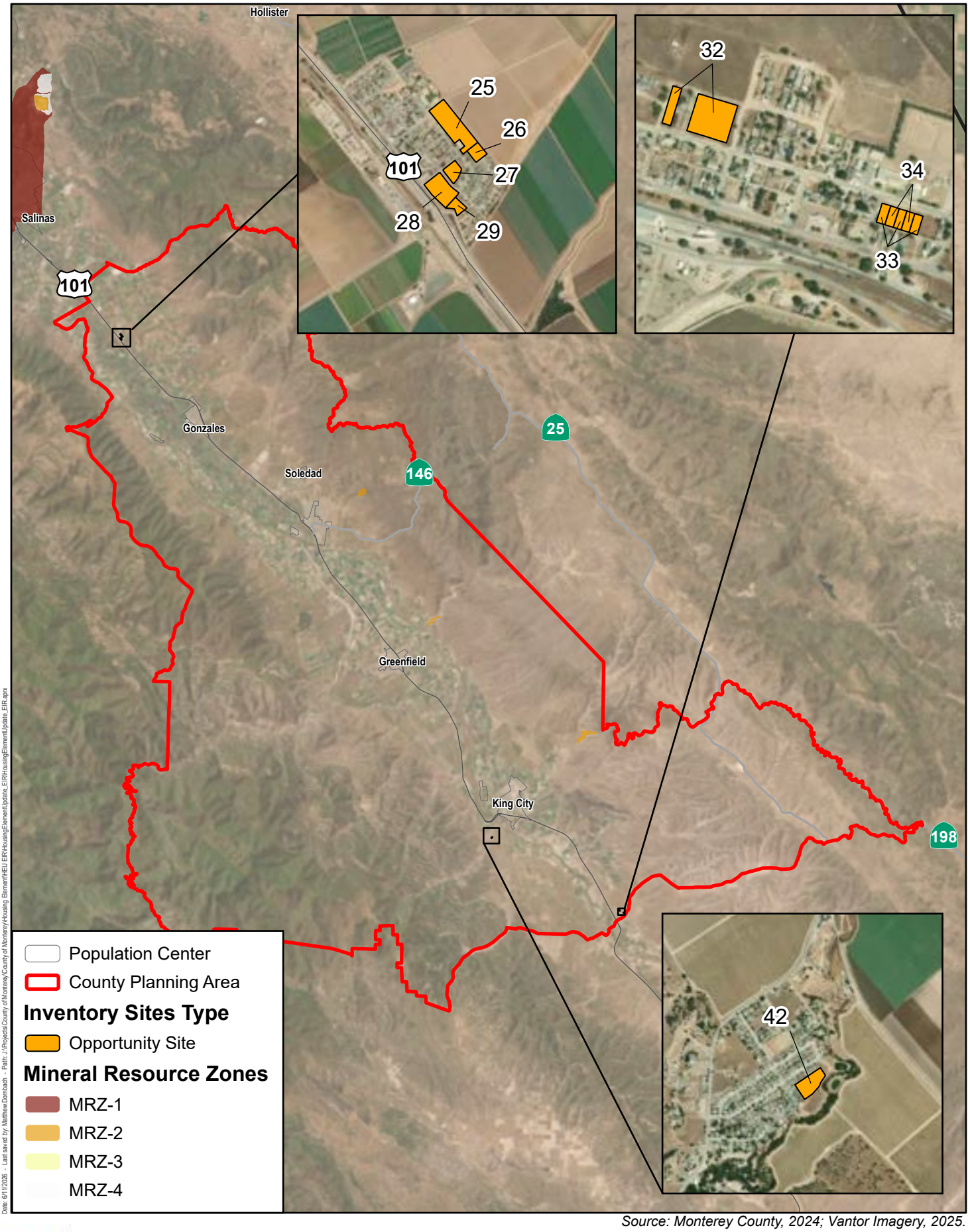
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**Figure 4.12-3b**

Mineral Resource Zones - Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

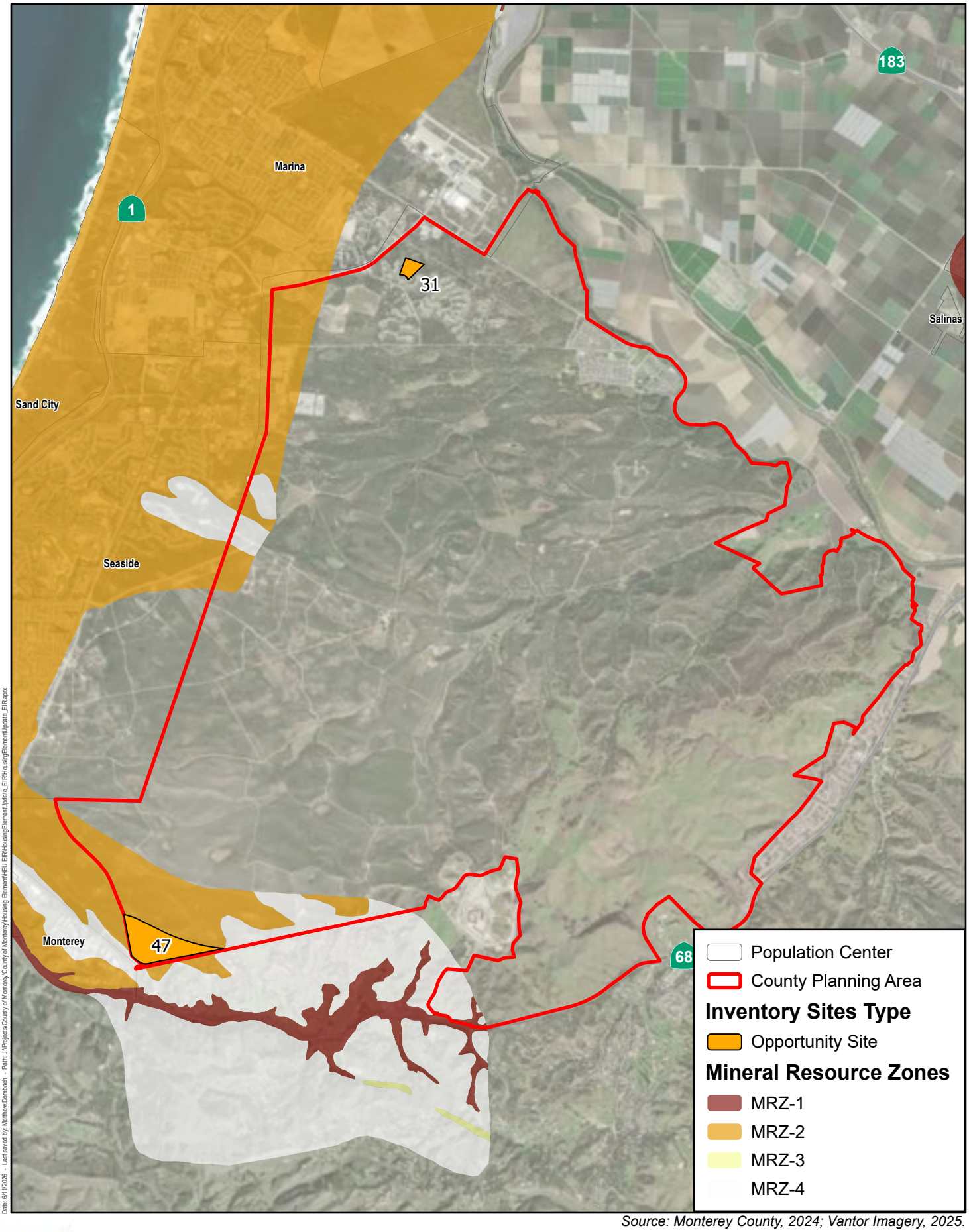
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**Figure 4.12-3c**

Mineral Resource Zones - Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: Monterey County, 2024; Vantor Imagery, 2025.

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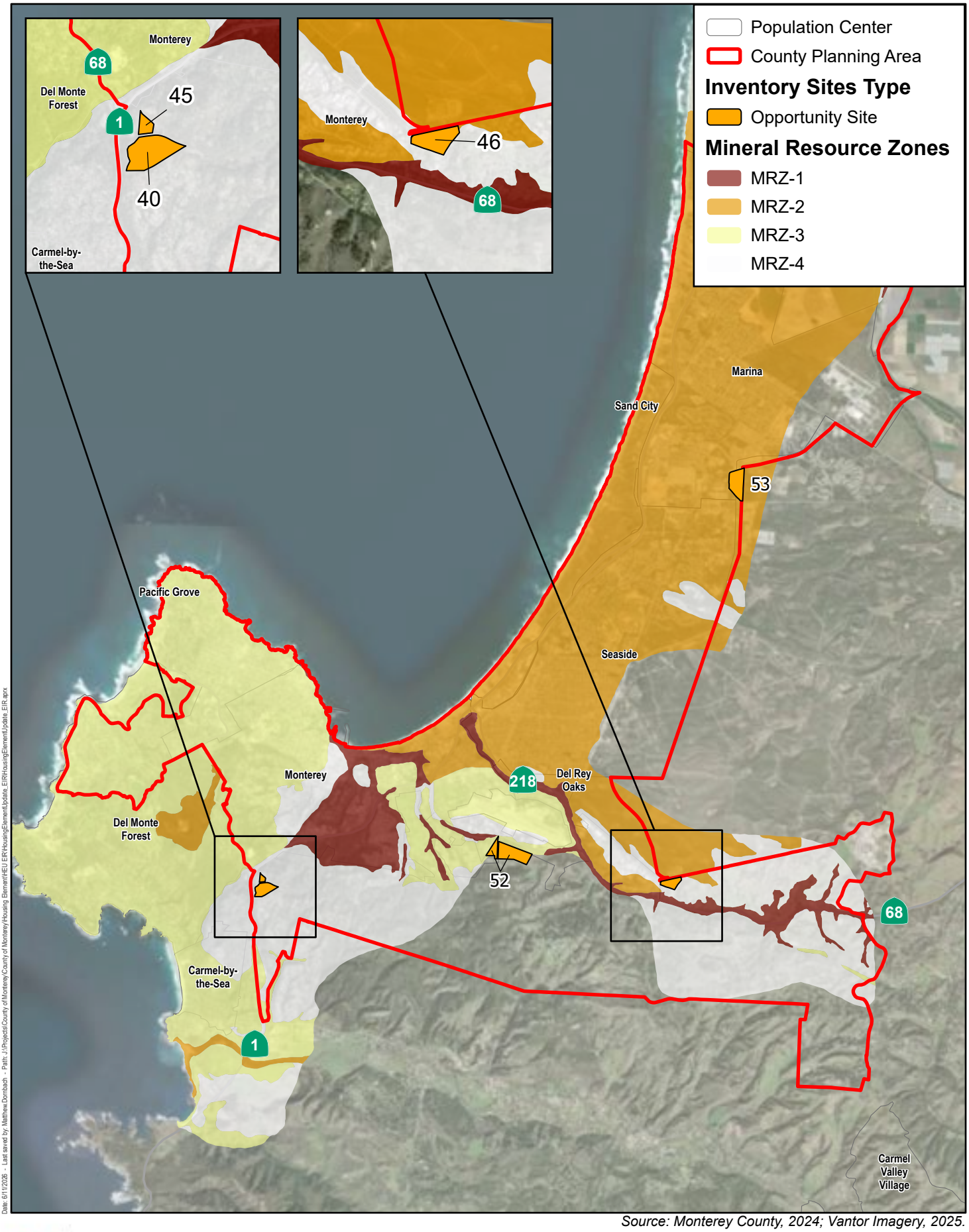
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**Figure 4.12-3d**

Mineral Resource Zones - Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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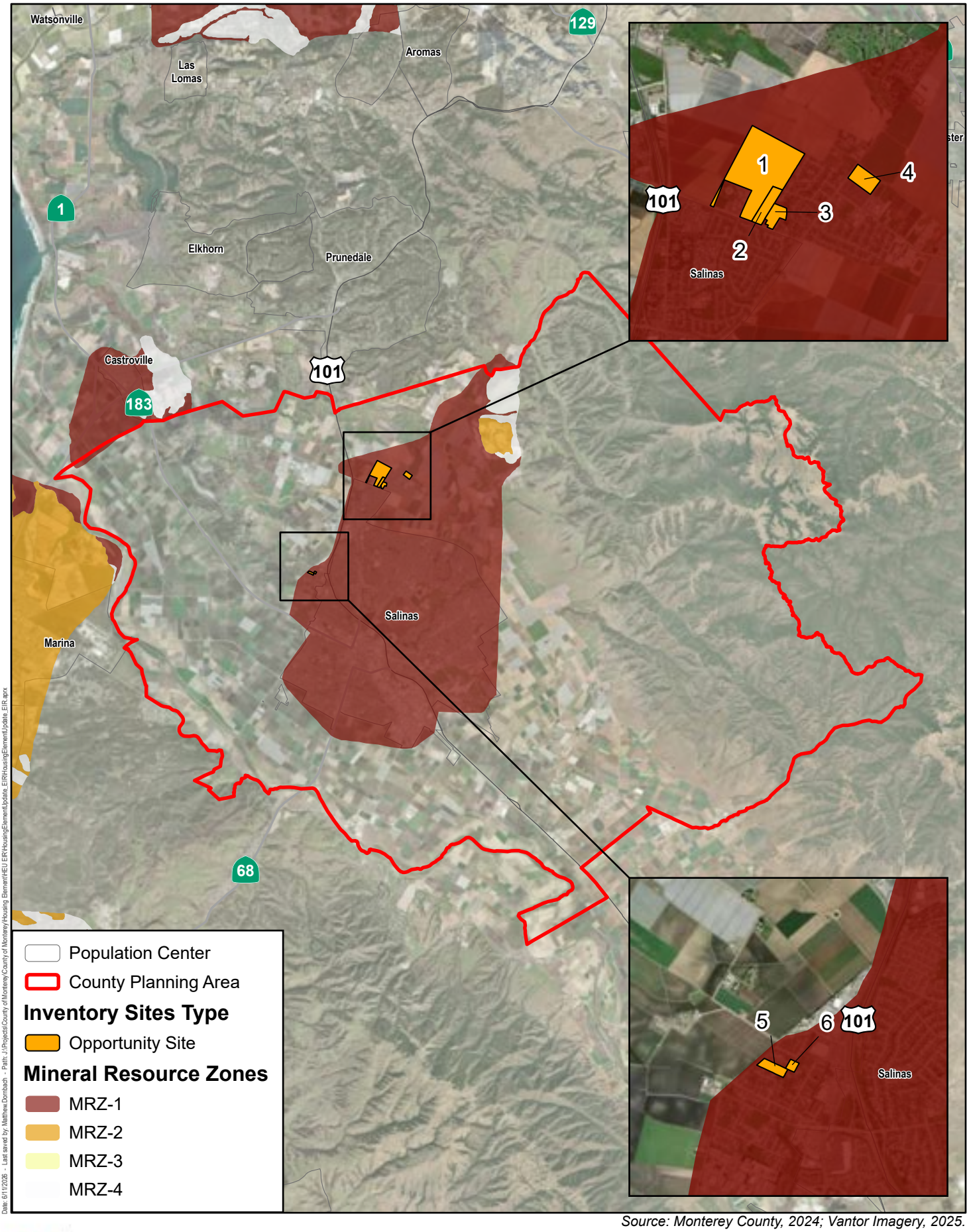
**Figure 4.12-3e**

Mineral Resource Zones - Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

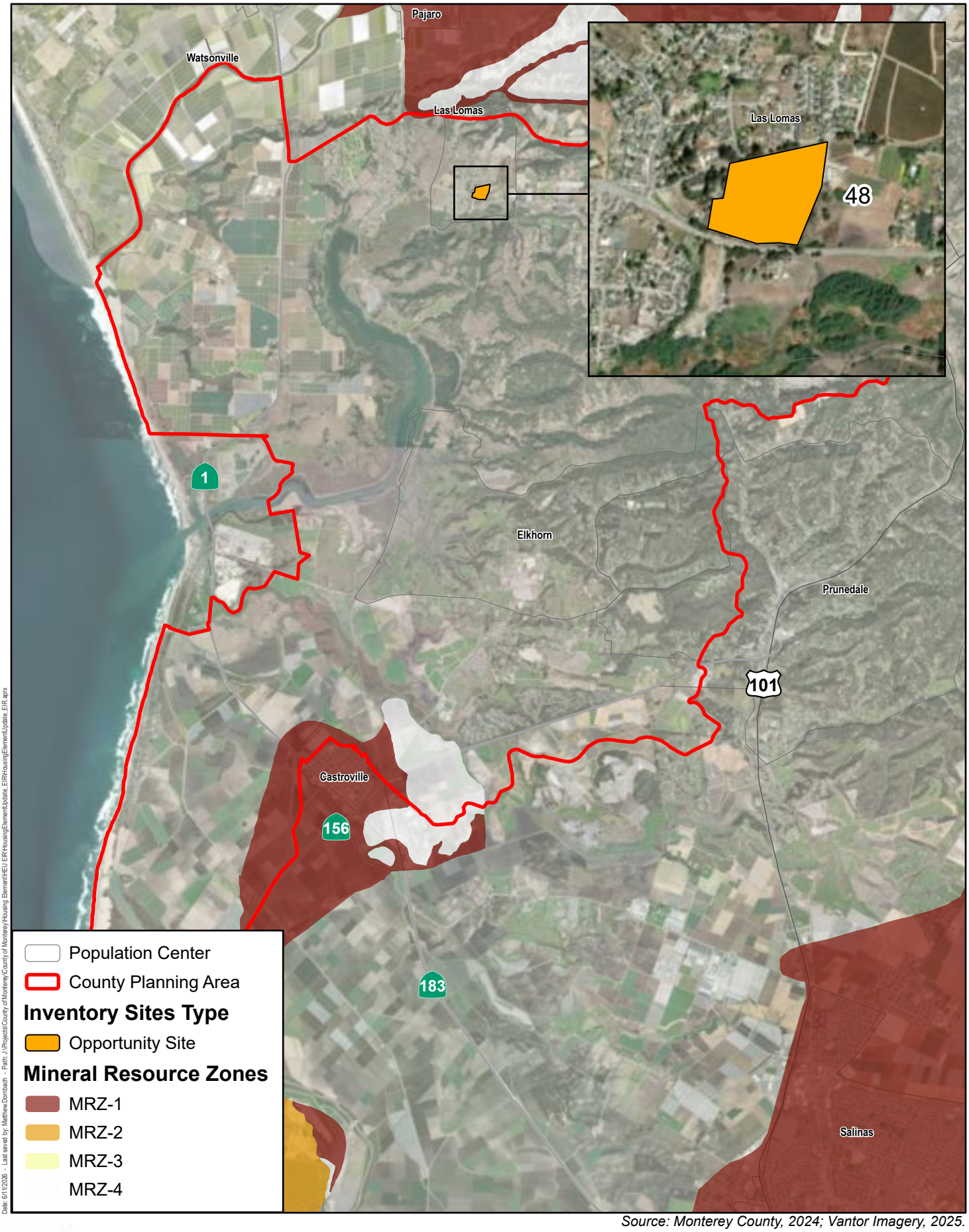
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**Figure 4.12-3f**

Mineral Resource Zones - Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: Monterey County, 2024; Vantor Imagery, 2025.

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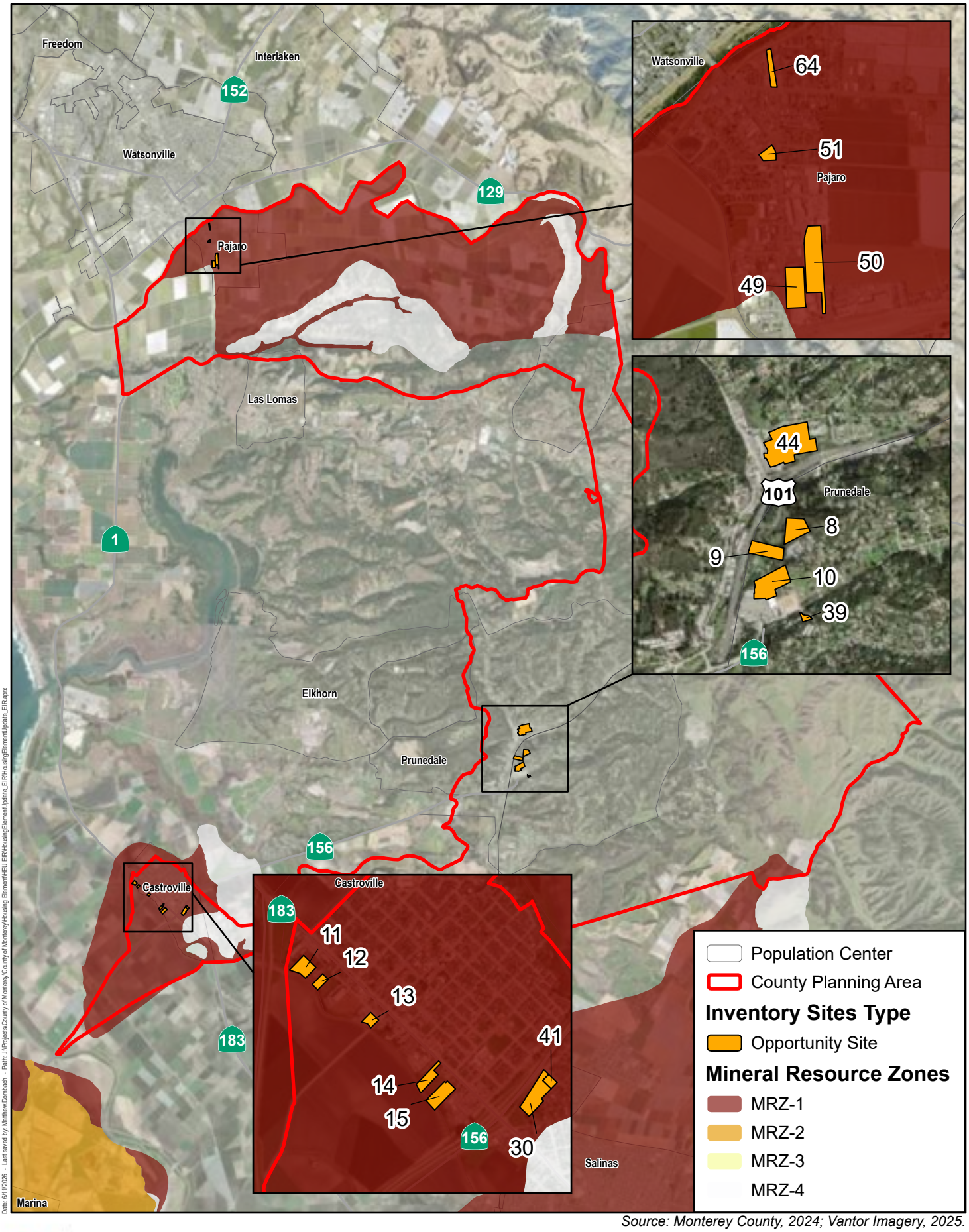
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**Figure 4.12-3g**

Mineral Resource Zones - North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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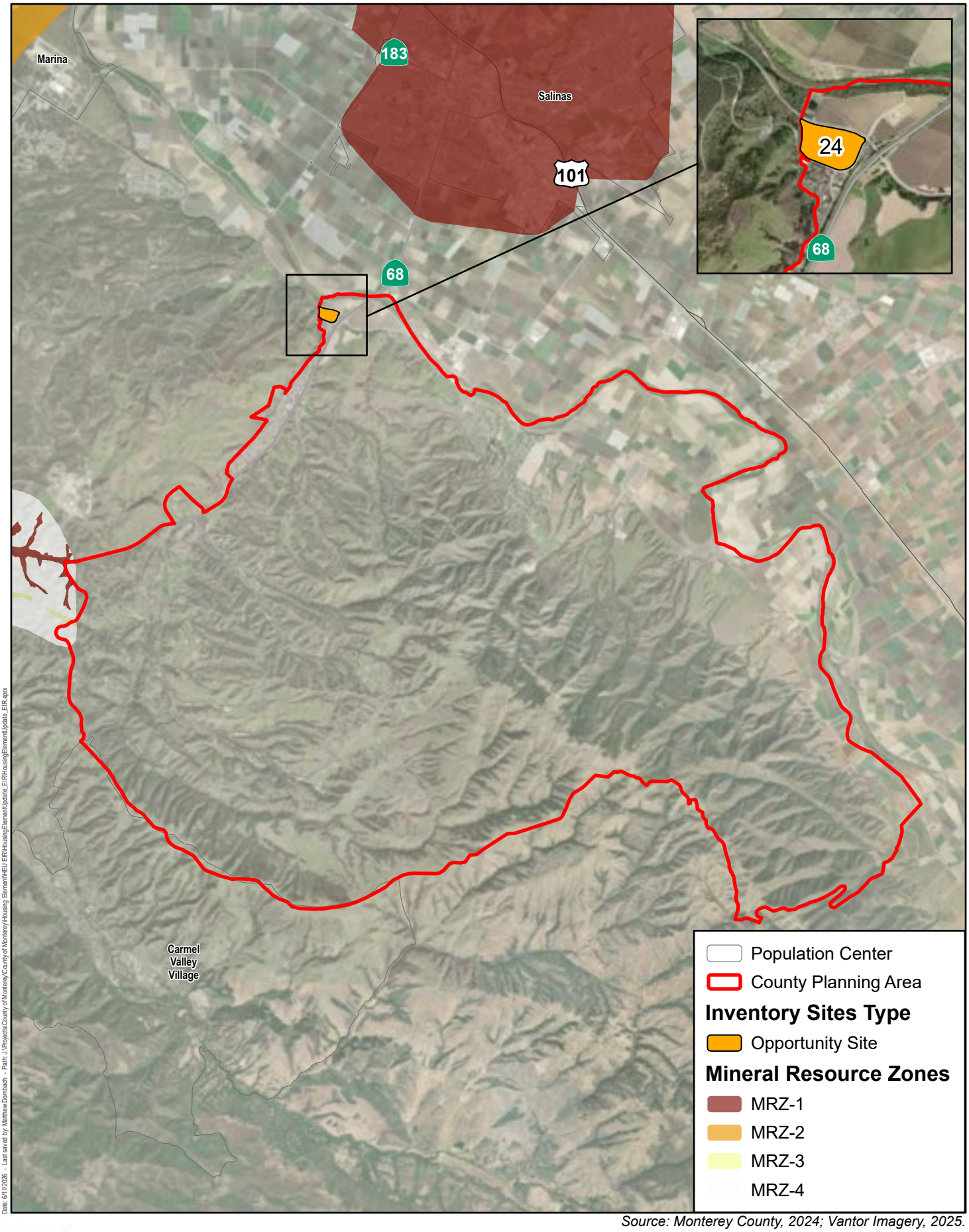
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**Figure 4.12-3h**

Mineral Resource Zones - North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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**Figure 4.12-3i**

Mineral Resource Zones - Toro Area Plan

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# 4.13 Noise

This section evaluates the potential for impacts related to noise County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses substantial temporary or permanent increases in ambient noise levels within the vicinity of the project, groundborne vibration, and exposure of people residing within 2 miles of an airport to excessive noise levels.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.13.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address noise.

### 4.13.1.1 Federal

#### Federal Aviation Administration Standards (Code of Federal Regulations, Title 14, Part 150)

Enforced by the Federal Aviation Administration (FAA), Code of Federal Regulations, Title 14, Part 150, prescribes the procedures, standards, and methods governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. The code also identifies those land uses that are normally compatible with various levels of exposure to noise by individuals. The FAA considers residential land uses to be compatible with exterior noise levels at or less than 65 A-weighted decibels (dBA) at the day-night noise level (Ldn).

### Federal Transit Administration Standards

Although the Federal Transit Administration (FTA) standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018) are routinely used for projects proposed by local jurisdictions. The manual includes criteria for assessing the impacts of groundborne vibration, presented in Table 4.13-1, Federal Transit Administration Groundborne Vibration Impact Criteria.

**Table 4.13-1. Federal Transit Administration Groundborne Vibration Impact Criteria**

| Land Use Category | Impact Levels (VdB) | | |
|---|---|---|---|
| | Frequent Events[1] | Occasional Events[2] | Infrequent Events[3] |
| Category 1: Buildings where vibration would interfere with interior operations | 65 | 65 | 65 |
| Category 2: Residences and buildings where people normally sleep | 72 | 75 | 80 |
| Category 3: Institutional land uses with primarily daytime uses | 75 | 78 | 83 |

**Source:** FTA 2018.

**Notes:** VdB = vibration decibel

Vibration levels are measured in or near the vibration-sensitive use.

[1] "Frequent Events" are defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" are defined as fewer than 30 vibration events of the same source per day.

## 4.13.1.2 State

### California Noise Control Act (California Health and Safety Code, Sections 46000– 46080)

California Health and Safety Code, Sections 46000–46080, known as the California Noise Control Act of 1973, find that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The act declares that the State of California has a responsibility to protect the health and welfare of its citizens through the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare. Section 46050.1 mandates development guidelines for the preparation and content of General Plan Noise Elements.

### California Noise Insulation Standards (California Code of Regulations, Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential uses. These standards are contained in the California Building Standards Code (Title 24). Title 24 requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise, with windows closed, attributable to exterior sources shall not exceed 45 dBA community

noise equivalent level (CNEL) in any habitable room. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure may be exposed to exterior noise levels of 60 dBA CNEL or greater. Such acoustical analysis must demonstrate that the residences have been designed to limit intruding noise to a maximum interior noise level of 45 dBA CNEL.

### Caltrans Transportation and Construction Vibration Guidance Manual

In September of 2013, the California Department of Transportation (Caltrans) published the Transportation and Construction Vibration Guidance Manual. This manual is often referenced in projects and provides practical guidance to planners and consultants who must address vibration issues associated with the construction, operation, and maintenance of projects. Guidance and procedures provided in the manual are used as screening tools for assessing the potential for adverse effects related to structural damage and human perception.

### California Airport Noise Standard

Title 21 of the California Code of Regulations governs public works, including a standard for aircraft noise exposure in 21 CCR Section 5012. The standard for the acceptable level of aircraft noise for people living within the vicinity of airports is established to be 65 dBA CNEL.

## 4.13.1.3 Local

### 2010 General Plan *(Inland)*

#### *Safety Element*

The 2010 General Plan Safety Element establishes noise and land use compatibility standards and outlines goals and policies to achieve these standards (County of Monterey 2010). New projects in the UMC are required to meet the noise exposure compatibility standards listed in Table S-2 in the Safety Element, shown in Table 4.13-2, 2010 General Plan Safety Element Land Use Compatibility for Community Noise (dB CNEL), when evaluating the land use of proposed development projects.

As shown in Table 4.13-2, in low density residential areas, ambient noise levels up to 60 dB CNEL are considered normally acceptable. In multi-family residential areas, ambient noise levels up to 65 dB CNEL are considered normally acceptable. Land uses in areas where ambient noise level is identified as “normally acceptable” are considered satisfactory, based upon the assumption that buildings involved are of normal conventional construction, without any special noise insulation requirements. Land uses in areas that experience a noise level that falls into the “conditionally acceptable” range require a detailed analysis of the noise reduction requirements and noise insulation features must be included in the design. Conventional construction, but with closed window and fresh air supply systems or air conditioning will normally suffice. For land uses where the exterior noise level falls

within the "normally unacceptable" range, new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features must be included in the design. For land uses where the exterior noise levels fall within the "clearly unacceptable" range, new construction generally shall not be undertaken (County of Monterey 2010).

**Table 4.13-2. 2010 General Plan Safety Element Land Use Compatibility for Community Noise (dB CNEL)**

| Land Use Category | Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
|---|---|---|---|---|
| Residential – Low Density Single Family, Duplex, Mobile Homes | <55–60 | 55–70 | 70–75 | 75–80 |
| Residential – Multi-family | <55–65 | 60–70 | 70–75 | 75–80 |
| Transient Lodging – Motels, Hotels | <55–65 | 60–70 | 70–80 | 80+ |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | 55–70 | 60–70 | 70–80 | 80+ |
| Auditoriums, Concert Halls, Amphitheaters | NA | 55–70 | 65–80 | NA |
| Sports Arena, Outdoor Spectator Sports | NA | 55–75 | 70–80 | NA |
| Playground, Neighborhood Parks | 55–70 | <65–70 | <70–80 | NA |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | 55–75 | 70–80 | NA | 80+ |
| Office Buildings, Business Commercial and Professional | 55–70 | <65–75 | 75–80 | NA |
| Industrial, Manufacturing, Utilities and Agriculture | 55–70 | 70–75 | >75 | NA |

**Source:** County of Monterey 2010.
**Notes:** CNEL = community noise equivalent level; dB = decibel; NA = not applicable

The 2010 General Plan Safety Element includes several noise-related policies, including Goal S-7 and Policies S-7.1 through S-7.10. In particular, Policy S-7.1 allows new noise-sensitive land uses only in areas where existing and projected noise levels are "acceptable" according to the Land Use Compatibility for Community Noise Table (Table 4-13.2). Policy S-7.2 requires proposed development to incorporate design elements necessary to minimize noise impacts on surrounding land uses and to reduce noise in indoor spaces to an acceptable level. Policy S-7.3 requires effective measures to reduce the indoor and outdoor noise levels to acceptable levels for development in areas identified as "normally acceptable." Policy S-7.6 requires preparation of an acoustical analysis as part of the environmental review process when noise-sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" or higher, or when proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptors. Policy S-7.7 requires a project-specific noise impact analysis when roadway noise exceeds 60 CNEL within the project site for proposed discretionary residential projects. If impacts are identified, the applicant shall conduct mitigation analysis using published Caltrans/Federal

Highway Administration guidelines and implement mitigation measures as required. Additionally, Policy S-7.9 includes allowable hours and days for construction activities pursuant to a County permit that exceed "acceptable" levels within 500 feet of a noise-sensitive land use.

## Area and Master Plans

### *Greater Monterey Peninsula Area Plan*

Policy GMP-4.2 encourages development within the vicinity of the Monterey Peninsula Airport and the Marina Municipal Airport to be sited, designed, and/or constructed to minimize noise hazards from aircraft and other sources.

### *Fort Ord Master Plan*

Noise Policies A-1 and B-1 through B-9 and associated programs comprise the Monterey County Fort Ord Noise Element. Objective A is focused on the application of land use combability criteria for noise and enforcement of noise regulations consistently throughout the Fort Ord planning area. Objective B is intended to ensure through land use planning that noise environments are appropriate for and compatible with existing and proposed land uses based on noise guidelines provided in the noise element. Specifically, Noise Policy B-3 requires acoustical studies by qualified acoustical engineers for all new development that could result in noise environments above "normally acceptable" as defined in the Fort Ord Reuse Plan to ensure that existing or proposed uses will not be adversely affected.

## 1982 General Plan (Coastal)

Goal 22 and objectives and policies thereunder are intended to maintain an overall healthy and quiet environment through adoption, revisions (as necessary), and implementation of noise reduction measures as well as through land use planning. Specifically, Policy 22.2.2 required the appropriate standards of soundproofing construction in all multiple residential structures as specified in the Building Code.

## Monterey County Code

### *Chapter 10.60 – Noise Control*

The Monterey County Noise Ordinance is codified in Chapter 10.60, Noise Control, of the Monterey County Code. The ordinance applies to "any machine, mechanism, device, or contrivance" within 2,500 feet of any occupied dwelling unit. Whereas the County's 2010 General Plan noise criteria apply to new proposed land uses, the noise ordinance is typically used for the control of noise from existing land uses. Additionally, Chapter 10.60 prohibits excessive or loud noises that result in a public nuisance. Specifically, no person shall operate machinery that produces a noise level exceeding 70 dBA measured from 50 feet (unless operated in excess of 2,500 feet from any occupied dwelling) or generate nighttime noise at certain levels between 9 p.m. and 7 a.m.

## Airport Land Use Plans

Most counties have established an Airport Land Use Commission (ALUC), as provided for by law, to prepare Airport Land Use Compatibility Plans (ALUCP) for the airports in that county and to review land use plans, development proposals, and certain airport development plans for consistency with the compatibility plans. In Monterey County, the ALUC function rests with the Monterey County ALUC.

### *Marina Airport Land Use Compatibility Plan*

The Marina Municipal ALUCP updates the 1996 Comprehensive Land Use Plan for Marina Municipal Airport. The Marina Municipal ALUCP was adopted in May 2019 by the Monterey County ALUC. The Marina Municipal ALUCP is based on the FAA approved Airport Layout Plan, approved by the FAA in 2018. That Plan depicts both the current and planned facilities for the airport. The Airport Safety Zones associated with runway activities and airport influence areas for the Marina Municipal Airport overlap with the project area, as shown on Figure 4.9-2a, Marina Municipal Airport – Airport Safety Zones, of this document and Exhibit 4C of the ALUCP. Additionally, ALUCP Exhibits 2D and 2E include the airport noise contours, included in this document as Figure 4.13-1a, Existing Marina Municipal Airport Noise Contours, and Figure 4.13-1b, Future Marina Municipal Airport Noise Contours.

### *Monterey Regional Airport Land Use Compatibility Plan*

The 2019 Monterey Regional ALUCP is intended to protect and promote the safety and welfare of residents, businesses, and airport users near the airport, while supporting the continued operation of the airport. Much of the Planning Area of the ALUCP is within the airport influence area as shown in Exhibit 1B of the Monterey Regional ALUCP. The Airport Safety Zones associated with runway activities and airport influence areas for the Monterey Regional Airport overlap with the v, as shown on Figure 4.9-2b, Monterey Regional Airport – Airport Influence Area, of this document and Exhibit 4C of the ALUCP. Exhibits 2D and 2E of the Monterey Regional Airport ALUCP display the airport noise contours included in this document as Figure 4.13-2a, Existing Monterey Regional Airport Noise Contours, and Figure 4.13-2b, Future Monterey Regional Airport Noise Contours.

## 4.13.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to noise.

### 4.13.2.1 Fundamentals of Environmental Noise

## Quantification of Noise

Caltrans defines noise as sound that are loud, unpleasant, unexpected, or undesired. Further, for noise analysis, noise only exists if a source, path, and receiver are present. Sound pressure waves must be

produced by a source and transmitted through a medium, such as air. The sound must be perceived by, registered by, or affect a receptor, such as an ear or noise monitoring device (Caltrans 2013a).

Sound pressure levels are quantified using a logarithmic ratio of actual sound pressures to a reference pressure squared, called bels. A bel is typically divided into tenths, or decibels (dB). Sound pressure alone is not a reliable indicator of loudness because frequency (or pitch) also affects how receptors respond to the sound. To account for the pitch of sounds and the corresponding sensitivity of human hearing to them, the raw sound pressure level is adjusted with a frequency-dependent A-weighting scale that is stated in units of decibels (dBA) (Caltrans 2013a). Typical A-weighted noise levels are listed in Table 4.13-3, Typical A-Weighted Noise Levels**.**

**Table 4.13-3. Typical A-Weighted Noise Levels**

| Common Outdoor Activities | Noise Level (dBA) | Common Indoor Activities |
|---|---|---|
| | **— 110 —** | Rock band |
| Jet flyover at 1,000 feet | | |
| | **— 100 —** | |
| Gas lawn mower at 3 feet | | |
| | **— 90 —** | |
| Diesel truck at 50 feet at 50 miles per hour | | Food blender at 3 feet |
| | **— 80 —** | Garbage disposal at 3 feet |
| Noisy urban area, daytime | | |
| Gas lawn mower, 100 feet | **— 70 —** | Vacuum cleaner at 10 feet |
| Commercial area | | Normal speech at 3 feet |
| Heavy traffic at 300 feet | **— 60 —** | |
| | | Large business office |
| Quiet urban daytime | **— 50 —** | Dishwasher next room |
| | | |
| Quiet urban nighttime | **— 40 —** | Theater, large conference room (background) |
| Quiet suburban nighttime | | |
| | **— 30 —** | Library |
| Quiet rural nighttime | | Bedroom at night |
| | **— 20 —** | |
| | | Broadcast/recording studio |
| | **— 10 —** | |
| | | |
| Lowest threshold of human hearing | **— 0 —** | Lowest threshold of human hearing |

**Source:** Caltrans 2013a.

**Note:** dBA = A-weighted decibel

A receptor's response to a given noise may vary depending on the sound level, duration of exposure, character of the noise sources, the time of day during which the noise is experienced,

and the activity affected by the noise. Activities most affected by noise include rest, relaxation, recreation, study, and communications, such as quiet conversation or telephone calls. In consideration of these factors, different measures of noise exposure have been developed to quantify the extent of the effects from various noise levels. For example, some measures consider the 24-hour noise environment of a location by using a weighted average that penalizes noise levels during normal relaxation and sleep hours. Other measures consider an average noise level over a period of time that includes ambient noise and a steady-state noise source for a given period of time within the averaging period (Caltrans 2013a). The indices for measuring community noise levels that are used in this Environmental Impact Report are defined below:

**Leq,** the equivalent energy level, provides an average acoustic or sound energy content of noise, measured during a prescribed period, such as 1 minute, 15 minutes, 1 hour, or 8 hours. The sound level may not be constant over the measured time period, but the average decibel sound level, given as dBA Leq, contains an equal amount of energy as the fluctuating sound level.

**CNEL**, the community noise equivalent level, is the average equivalent A-weighted sound level over a 24-hour period. This measurement applies weights to noise levels during evening and nighttime hours to compensate for the increased disturbance response of people at those times. CNEL is the equivalent sound level for a 24-hour period with a +5 dBA weighting applied to all sound occurring between 7:00 p.m. and 10:00 p.m. and a +10 dBA weighting applied to all sound occurring between 10:00 p.m. and 7:00 a.m.

**Ldn,** the day-night noise level, is a 24-hour Leq, except that the nighttime hours (10:00 p.m. to 7:00 a.m.) are assessed a 10 dBA penalty. This penalty attempts to account for the fact that nighttime noise levels are potentially more disturbing than equal daytime noise levels.

The decibel level of a sound decreases (or attenuates) as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source. Sound that originates from a linear (or "line") source, such as vehicular traffic, attenuates by approximately 3 dBA per doubling of distance. Other contributing factors that affect sound reception include ground absorption, topography that provides a natural barrier, meteorological conditions, or the presence of human-made obstacles, such as buildings and sound barriers (Caltrans 2013a).

## Noise Effects

Reaction to a given sound varies depending on acoustic characteristics of the source and the environment of the receptor. The A-scale deemphasizes low-frequency sounds because humans are more sensitive to high-frequency sounds that are more likely to cause hearing damage. People tend to compare an intruding noise to existing background noise levels. If a new noise is

considerably louder or noticeable above existing levels, it is generally considered objectionable. The activity that the receptor is engaged in also affects response. For example, the same noise source, such as constant freeway traffic, may be more objectionable to people sleeping than to workers in a factory. A 3 dBA change is the smallest increment that is perceptible by most receivers, and a 5 dBA change in community noise level is clearly noticeable. Generally, 1 to 2 dBA changes are not detectable, except under controlled laboratory conditions. A sound that is 10 dBA greater than the reference sound is typically perceived as twice as loud (Caltrans 2013a).

#### 4.13.2.2 Fundamentals of Environmental Vibration

Vibration is defined as dynamic excitation of an elastic system, such as the ground or a structure, that results in oscillatory movement of the system (Caltrans 2013b). Typical human-made causes of earthborne vibration include trains and construction activities such as blasting, pile driving, and operation of heavy earthmoving equipment. The resulting waves transmitted through solid material are referred to as structureborne or groundborne vibration. Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. The vibration levels inside a building depend on the vibration energy that reaches the foundation and the characteristics of the structure that affect propagation of the vibration through it. A heavier building will typically experience lower vibration levels. The most common impact associated with vibration is annoyance resulting from the effects of vibration, such as building movement, rattling of windows, shaking of items on shelves or walls, and rumbling sounds. In more extreme cases, building damage may occur. Because the effects of vibration elicit a greater response than the vibration itself, vibration is typically only perceptible to people inside buildings (FTA 2018).

Vibration levels are typically expressed in terms of the peak particle velocity (PPV) and root mean square (RMS) amplitude, both in inches per second (in/sec). PPV is most appropriate for evaluating building damage potential. Caltrans estimates that continuous vibration levels of less than 0.08 PPV and single-event vibration levels of less than 0.12 PPV do not result in damage to even the most fragile historical buildings (Caltrans 2013b). The FTA has identified a maximum PPV of 0.2 in/sec for fragile buildings and 0.12 in/sec for extremely fragile historical buildings (FTA 2018).

PPV does not account for human response to vibration. The RMS amplitude is used to represent average vibration amplitude, which accounts for the time it takes for the human body to respond to vibration signals. The RMS amplitude is also given in decibel notation, referenced as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration relative to human response. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Like airborne noise, groundborne noise is measured in dBA. The sound level accompanying vibration is generally 25 to 40 dBA lower than the vibration velocity level in VdB. Due to its low-frequency components, groundborne noise sounds louder than broadband noise with the same noise level. Typical vibration levels from various sources are shown in Table 4.13-4,

Typical Levels of Groundborne Vibration. As shown in this table, the background vibration velocity level in residential areas is usually around 50 VdB, which is below the 65 VdB threshold of human perception (FTA 2018). The same human reaction corresponds to a given vibration velocity level and its resulting noise level; therefore, for simplicity, this analysis refers only to a source's VdB to describe potential human response to groundborne vibration and noise.

**Table 4.13-4. Typical Levels of Groundborne Vibration**

| Vibration Level VdB[1] | in/sec RMS | Typical Sources (50 feet from source) | Human/Structural Response |
|---|---|---|---|
| 100 | 0.01 | Blasting from construction projects | Threshold, minor cosmetic damage to fragile buildings |
| 90–100 | 0.003–0.01 | Bulldozers and other heavy tracked construction equipment | Difficulty with tasks such as reading |
| 80–90 | 0.001–0.003 | Commuter rail and rapid transit, upper range | Residential annoyance, infrequent events (e.g., commuter rail) |
| 70–80 | 0.0003–0.001 | Typical commuter rail, bus or truck over bump, typical rapid transit | Residential annoyance, frequent events (e.g., rapid transit) |
| 60–70 | 0.0001–0.0003 | Bus or truck, typical | Limit for vibration-sensitive equipment, approximate threshold for human perception |
| 50 | 0.00003 | Typical background vibration | Not detectable |

**Source:** FTA 2018.

**Notes:** in/sec = inches per second; RMS = root mean square; VdB = vibration decibel

[1] RMS vibration velocity level in VdB relative to 10–6 in/sec.

The general human response to different groundborne vibration velocity levels is described in Table 4.13-5, Human Response to Different Levels of Groundborne Vibration.

**Table 4.13-5. Human Response to Different Levels of Groundborne Vibration**

| Vibration Velocity Level | Human Reaction |
|---|---|
| 65 VdB | Approximate threshold of perception for many people. Mid-frequency sound may disturb sleep. |
| 75 VdB | Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is annoying. Mid-frequency noise disturbs sleep and is considered annoying in more quiet areas. |
| 85 VdB | Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise disturbs sleep and mid-frequency noise can be annoying to daytime NSLUs, such as schools. |

**Source:** FTA 2018.

**Note:** dBA = A-weighted decibel; NSLU = noise-sensitive land use; VdB = vibration decibel

#### 4.13.2.3 Existing Noise Environment

Noise-sensitive land uses include noise receptors (receivers) where an excessive amount of noise interferes with normal activities. Noise-sensitive land uses typically consist of residences, hotels, offices, places of worship, hospitals, schools, and libraries. The Monterey County 2010 General

Plan Safety Element identifies principal noise sources in the County as transportation facilities, industrial and food-packing plants, mining operations, Laguna Seca Raceway, and Moss Landing Power Plant. Transportation-related noise sources include roadways, the Union Pacific Railroad Coast Line, and airports. Roadway noise sources providing north–south connections include State Route 1 between the Cities of Marina and Monterey, and US-101 between the Cities of Prunedale and Salinas, and Gonzales to Greenfield. Roadway noise sources providing east–west connections include State Route 68 between the Cities of Monterey and Salinas, and State Route 156 between the Cities of Castroville and the US-101 connection in Prunedale. Airport noise sources in the County include the Monterey Regional Airport, Salinas Municipal Airport, Marina Municipal Airport, and Mesa Del Rey Airport (County of Monterey 2010).

### 4.13.3 Method of Analysis

The following impact analysis focuses on potential noise-related impacts that would result from HEU6 implementation. The evaluation considers project plans, current conditions in the UMC, and applicable regulations and guidelines. In addition, the Noise Technical Report (Appendix K) informs project-related impacts.

The Federal Highway Administration (FHWA) Noise Prediction Model was used to estimate near-term and long-term traffic noise levels with and without project implementation. Traffic volumes and roadway characteristics with buildout of the project used in the FHWA Noise Prediction Model were obtained from Kimley-Horn (Appendix L of the PEIR). As such, operational traffic noise modeling includes evaluation of the theoretical maximum buildout capacity of 12,497 housing units, consistent with the assumptions of the vehicle miles traveled analysis in Section 4.16, Transportation. However, as described in Chapter 3, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in UMC.

Impacts related to groundborne vibration were evaluated based on typical vibration levels published by the FTA. Impacts related to aircraft noise were assessed based on a review of published noise contours and planning documents for the Monterey Regional Airport, Salinas Municipal Airport, Marina Municipal Airport, and Mesa Del Rey Airport.

### 4.13.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on noise if it would result in:

- **Threshold 1:** Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- **Threshold 2:** Generation of excessive groundborne vibration or groundborne noise levels.

- **Threshold 3:** For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

### Significance Thresholds

The applicable threshold for project construction is Chapter 10.60, Noise Control, of the Monterey County Code. An impact would occur if construction would produce a noise level exceeding 70 dBA measured from 50 feet from machinery operating within 2,500 feet from any occupied dwelling. A significant impact could also occur if construction would be required between 9 p.m. and 7 a.m. Construction vibration would be significant if it would exceed the applicable standard in Table 4.13-1.

Implementation of the project would result in a significant direct impact during operation if it would result in an increase in vehicle noise levels exceeding the normally acceptable noise standard for residences. Per 2010 General Plan Safety Element Policy S-7.7 and Table 4.13-6, Typical Noise Levels for Construction Equipment, 60 dBA CNEL is an acceptable ambient noise standard for both single- and multi-family residences. Therefore, 60 dBA is used as the threshold for this analysis, although noise levels up to 65 dBA CNEL are within the normally compatible range for multi-family residences. A significant impact would also occur if the project would result in a noticeable (more than 3 dBA) increase in noise levels on roadways exceeding 60 dBA CNEL without the project.

The project would also result in a significant impact during operation if it would result in the development of new sensitive receptors in areas exposed to noise levels in excess of the compatibility standards listed in Table 4.13-2.

## 4.13.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to noise that could result from implementation of the project.

### 4.13.5.1 Threshold 1: Excessive Noise Levels

**Threshold 1:** Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

### Impact Analysis

Potential impacts related to excessive noise levels from construction and operation of future development proposed through implementation of the HEU6 are discussed below.

### *Construction Noise*

Construction noise associated with future development under the HEU6 would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for on-site construction activities and construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. As shown in Table 4.13-6, sound levels from typical construction equipment range from 74 to 85 dBA Leq at 50 feet from the source (FHWA 2018). Noise from construction equipment generally exhibits point source acoustical characteristics. As defined previously, a point source sound decreases at a rate of 6 dBA per doubling of distance from the source.

**Table 4.13-6. Typical Noise Levels for Construction Equipment**

| Construction Equipment | Typical Noise Level at 50 Feet (dBA) |
|---|---|
| Air Compressor | 77.7 |
| Backhoe | 77.6 |
| Concrete Mixer Truck | 78.8 |
| Crane | 80.6 |
| Dozer | 81.7 |
| Dump Truck | 76.5 |
| Excavator | 80.7 |
| Generator | 80.6 |
| Grader | 85 |
| Loader | 79.1 |
| Paver | 77.2 |
| Roller | 80 |
| Scraper | 83.6 |
| Tractor | 84 |
| Welder | 74 |

**Source:** FHWA 2018.
**Notes:** dBA = A-weighted decibel

No specific development is proposed at this time; thus, construction phasing and equipment parameters are not available for future development under the project. However, typical construction activities that would be anticipated to occur in association with the development of future land uses and infrastructure would include grading and site preparation; utilities installation;

surface improvements, including paving and landscaping; building construction; and external/internal building work. Construction of any off-site improvements could require vegetation clearing, underground utility installation, and paving. Standard equipment commonly used for construction projects include dozers, loaders, graders, backhoes, scrapers, and miscellaneous trucks. As stated previously, sound levels from typical construction equipment have the potential to reach 85 dBA Leq.

The Monterey County Noise Ordinance (refer to Section 4.13.1.3) establishes time of day restrictions and noise level limits for operation of any machine, mechanism, device, or contrivance within 2,500 feet of any occupied dwelling unit, which applies to construction equipment. The ordinance limits noise generated in excess of 70 dBA at a distance of 50 feet from the noise source unless it is operated in excess of 2,500 feet from an occupied dwelling unit. The ordinance further limits any loud or unreasonable sound between the hours of 9:00 p.m. to 7 a.m. any day of the week.

Residential land uses are located throughout UMC and through implementation of HEU6, additional single-family and multi-family residences would be accommodated in the planning area. As shown in Table 4.13-6, construction equipment would have the potential to exceed 70 dBA at 50 feet, and identified sites are generally within 2,500 feet of existing residences. The County would continue to enforce the Monterey County Noise Ordinance, which restricts the hours of construction activity and includes a noise level limit to minimize disturbance from construction noise. However, because typical construction equipment may exceed 70 dBA at 50 feet, and construction details are currently unknown, best management practices should be implemented to reduce construction noise exposure at existing residences. Construction noise impacts under the HEU6 would be potentially significant. Implementation of Mitigation Measures (MM-) NOI-OBJ-1 and MM-NOI-CONS-2 would require implementation of best management practices that would minimize construction noise exposure in compliance with Chapter 10.60, Noise Control, of the Monterey County Code.

### *Operational Noise*

Implementation of the HEU6 would accommodate a range of residential land uses. Noise from operation of these land uses as well as an analysis of increases in vehicle noise that may result from project implementation and the potential for new sensitive receptors to be exposed to incompatible noise levels is discussed below.

#### Stationary Noise from Residential Development

Noise generated from residential uses is generally described as “nuisance noise.” Nuisance noise is defined as intermittent or temporary neighborhood noise from sources such as amplified music, barking dogs, and landscape maintenance equipment that may be disturbing to other residents. Nuisance noise impacts are more likely to occur in more densely developed areas where residences would be closer together and where neighbors would be more likely to hear a neighbor’s dog or

music. However, single-family development would also likely be exposed to occasional nuisance noise. The Monterey County Noise Ordinance, Section 10.60.030, prohibits nuisance noise from noise-producing devices from exceeding the noise standards at any time. Future development of residential units is required to comply with this Monterey County Noise Ordinance and limit exposure to excessive nuisance noise. The Monterey County Enforcement Officer, as authorized and empowered in the Monterey County Noise Ordinance, Section 10.60.050, enforces the noise provisions of the Monterey County Noise Ordinance. Additionally, nuisance noises would vary in type, duration, and location. Because these noises would occur independently and generally would not affect the same receptors at the same time, the combined noise from residential development would not exceed the limits established by the Monterey County Ordinance. Individual residential buildings may also include heating, ventilation, and air conditioning (HVAC) systems that would generate mechanical equipment noise. HVAC units would be appropriately sized for the proposed building and would be required to provide shielding or other noise reducing features to ensure they do not generate significant noise affecting building residents. HVAC unit operation would be subject to Title 24 noise insulation standards (for multi-family residential development) and General Plan Noise Element noise compatibility standards (for all residences) prior to obtaining a certificate of occupancy. Therefore, nuisance noise and HVAC use in residential neighborhoods would not result in a significant impact.

#### Permanent Increase in Vehicle Noise

The following analysis discusses the potential for the project to permanently increase ambient noise levels as a result of increased traffic noise based on the Noise Technical Memorandum (Appendix K to this PEIR). The potential for implementation of the HEU6 to permanently increase ambient noise levels as a result of increased traffic was assessed using standard noise modeling equations adapted from the Federal Highway Administration Noise Prediction Model (Appendix K). The modeling calculations take into account the posted vehicle speed, median width, average daily trip volume, and estimated vehicle mix. Traffic volumes and roadway characteristics with buildout of the project were obtained from Kimley-Horn (Appendix L). Noise levels were calculated at 50 feet from the centerline of each roadway segment. Generally, noise from heavily traveled roadways experience a decrease of approximately 3 dBA for every doubling of distance. The actual sound level at any receptor location depends on such factors as the source-to-receptor distance and the presence of intervening structures, barriers, vegetation, and topography; therefore, the result of the calculations is the worst-case scenario.

The 10 study area segments that would experience the greatest percent increase in vehicle trips as a result of project implementation were selected for modeling to represent the potential changes in traffic noise conditions compared to future conditions without the project. Timing of new housing in the UMC is unknown, and buildout is assumed to occur through the year 2031, during which regional growth and development elsewhere in UMC will occur. The project is intended to

accommodate planned growth as determined by Association of Monterey Bay Area Governments' Regional Housing Needs Allocation, but growth under the project for traffic impact is evaluated to identify project-level community impacts (Appendix L). The growth projected by the Association of Monterey Bay Area Governments is not dependent on HEU6 adoption. It reflects regional trends and projections. Increases in vehicle trips as a result of regional growth, including in the UMC, would occur whether or not the HEU6 is implemented. As such, attributing the increase in vehicle trips to the HEU6 is conservative.

Table 4.13-7, Future Traffic Noise Levels (Year 2031), provides long-term increases in noise levels with project implementation. As shown in Table 4.13-7, implementation of the HEU6 would not result in a more than 3 dBA increase on any roadway segment. Project implementation would cause two roadway segments to exceed 60 dBA CNEL at 50 feet from the roadway centerline by less than 1 dBA: Olmstead Road from Highway 68 to Via Malposo, and a planned future extension of El Dorado Drive identified in the Salinas General Plan from San Juan-Natividad Collector to East Boronda Road. However, as shown in Attachment 1 to Appendix K, the 60 dBA CNEL contour for these roadways would be 55 feet or less from the roadway centerline. As such, there is limited potential for new single-family residential structures to be within the future 60 dBA CNEL contour. There are no existing sensitive receptors within this contour distance on either roadway segment, and this segment of El Dorado Drive is not yet developed. Under the HEU6, Opportunity Site 52, located adjacent to Olmstead Road, would be split zoned for High Density Residential at 30 dwelling units per acre (HDR/30) and would be normally compatible with noise levels up to 65 dBA CNEL. Additionally, a noise level of 60.4 or 60.6, is functionally the same as 60 dBA CNEL as related to actual experience in the noise environment and, therefore, consistent with the 60 dBA CNEL threshold for noise exposure. As described in the California Department of Transportation Technical Noise Supplement (Caltrans 2013a), a trained, healthy human ear may discern changes in sound levels of 1 dBA when exposed to steady noise under controlled conditions in an acoustics laboratory. Therefore, noise levels that are less than a 1 dBA change from 60 dBA CNEL would generally be experienced as 60 dBA CNEL even under a conservative controlled laboratory condition. Therefore, the project would not result in a significant direct vehicle noise impact.

**Table 4.13-7. Future Traffic Noise Levels (Year 2031)**

| Roadway | Segment | Near-Term Noise Level (dBA CNEL) | Future + Project (dBA CNEL) | Increase in Noise Level | Significant Impact? |
|---|---|---|---|---|---|
| Russell Road | Bahia Avenue to Van Buren Avenue | 69.7 | 72.1 | 2.4 | No |
| San Juan Grade Road | Van Buren Avenue to Russell Road | 66.7 | 67.9 | 1.2 | No |
| Old Stage Road | Goat Road to Chualar Road | 56.1 | 56.8 | 0.7 | No |
| Olmsted Road | Salinas Highway (Highway 68) to Via Malposo | 58.4 | 60.4 | 2.0 | No |

**Table 4.13-7. Future Traffic Noise Levels (Year 2031)**

| Roadway | Segment | Near-Term Noise Level (dBA CNEL) | Future + Project (dBA CNEL) | Increase in Noise Level | Significant Impact? |
|---|---|---|---|---|---|
| Josselyn Canyon Road | Sylvan Road to Oak Crest Circle | 49.4 | 51.1 | 1.7 | No |
| Broadway Avenue | Ancon Street to Yosemite Street | 55.7 | 56.7 | 1.0 | No |
| N Main Street | South of Russell Road | 68.8 | 70.7 | 1.9 | No |
| Frontage Road | Esperanza Road to Payson Street | 57.5 | 59.1 | 1.6 | No |
| Independence Boulevard | Russell Road Extension to East Boronda Road | 60.3 | 62.1 | 1.8 | No |
| El Dorado Drive Extension | San Juan-Natividad Collector to East Boronda Road | 58.2 | 60.6 | 2.4 | No |

**Source:** Appendix K.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level

**Noise Incompatibilities with New Sensitive Receptors**

Future development projects to be facilitated by the HEU6 have the potential to result in the placement of new sensitive receptors in areas that would be exposed to vehicle noise levels in excess of the County's noise and land use compatibility standards. As shown in Table 4.13-7, vehicle noise on several modeled segments would be within the normally acceptable noise level range of up to 60 dBA CNEL at 50 feet from roadway centerlines under near-term and future conditions. Therefore, conventional construction—such as wall, insulation, and window design consistent with current building codes—would generally be sufficient to reduce noise exposure to an acceptable level. However, noise levels higher than 60 dBA CNEL are calculated for Russell Road from Bahia Avenue to Van Buren Avenue (60 dBA CNEL up to 322 feet from centerline), San Juan Grade Road from Van Buren Avenue to Russel Road (60 dBA CNEL up to 169 feet from centerline), North Main Street south of Russell Road (60 dBA CNEL up to 258 feet from centerline), and Independence Boulevard from Russell Road Extension to East Boronda Road (69 dBA CNEL up to 69 feet from centerline). As described above, modeled segments of Olmsted Road and El Dorado Drive are calculated to exceed 60 dBA up to 55 feet from centerline. These segments are modeled to represent the project's impact on roadways but are not the only roadway in the UMC that could expose new residence to noise levels above 60 dBA CNEL. Modeled roadways that are calculated to result in noise levels below 60 dBA generally experience 2,200 average daily trip (ADT) or less when posted speed limit is 45 miles per hour (mph), and 7,868 ADT or less when posted speed limit is 25 mph. As such, future residences located along higher speed roadways experiencing 1,200 ADT or more would have the potential to be in an area that exceeds the County's normally acceptable standard for residential development. For example, Opportunity Sites 1-3 located along Russell Road, and new development would likely be exposed to noise levels above 60 dBA CNEL.

Development streamlining under the Consistency Process of the HEU6 would be required to comply with 2010 General Plan Safety Element Noise Policies S-7.2, S-7.3, S-7.6, and S-7.7, and 1982 General Plan Policy 22.2.2. These policies require proposed new sensitive receptors to include a site-specific evaluation of potential noise exposure and installation of noise attenuation if the new receptors will be in an area where interior noise levels may exceed 60 dBA CNEL. Policy S-7.6 specifically requires an acoustical analysis for projects where noise-sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" or higher, and Policy S-7.7 requires an acoustical analysis where roadway noise would exceed 60 dBA CNEL. Policies S-7.2, S-7.3, and S-7.7 specially require that new development projects incorporate measures to ensure noise compatibility for interior and exterior noise, such as implementation of sound walls, dual pane glass, or changes to building location on a site. Additionally, all new residential development on the project site would be subject to existing state requirements to demonstrate that interior noise levels of 45 dBA CNEL would be achieved in areas potentially exposed to traffic noise above compatible noise levels. This requirement is also found in 1982 General Plan Policy 22.2.2. Title 24 of the California Code of Regulations requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise, with windows closed, attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure may be exposed to exterior noise levels of 60 dBA CNEL or greater. With this existing state and County framework, future development under the HEU6 would be required to demonstrate that appropriate noise attenuation has been incorporated into project design to achieve noise compatibility.

Residential projects that would qualify for streamlining under the Objective Process would be processed objectively, meaning these projects may not undergo subsequent environmental review or be evaluated for compliance with Policies S-7.2, S-7.3, S-7.6, and S-7.7, or 1982 General Plan Policy 22.2.2. As such, projects streamlining under the Objective Process would have the potential to result in a significant impact related to exposure of new sensitive receptors to ambient noise levels in excess of the County's noise and land use compatibility standards. Implementation of MM-NOI-OBJ-3 would require preparation of acoustical studies, if required based on location, and incorporation of noise reduction measures in compliance with Policies S-7.2, S-7.3, S-7.6, and S-7.7 of the 2010 General Plan Safety Element, or 1982 General Plan Policy 22.2.2.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

The following MM-NOI-OBJ-1 and MM-NOI-CONS-2 would minimize construction noise exposure in compliance with Chapter 10.60, Noise Control, of the Monterey County Code, and

MM-NOI-OBJ-3 would minimize operational noise for residential developments streamlining under the Objective Process.

### *Construction Noise Control*

**MM-NOI-OBJ-1:** Prior to approval of a grading permit for new by-right development requiring use of heavy construction equipment within 2,500 feet of an occupied residence, the construction contractor shall demonstrate that the following best management practices would be implemented during construction, as applicable. The best management practices shall be included in project construction documents, including the Grading Plan and contract with the construction contractor. The County of Monterey (County) shall ensure that these items are included in project construction documents. Practices may include but not be limited to the following:

1. Limit hours of construction to between 7:00 a.m. and 7:00 p.m. Monday through Saturday.
2. The construction contractor shall provide written notification to the occupied residences within 2,500 feet of construction activities at least 3 weeks prior to the start of construction activities informing them of the estimated start date and duration of construction activities, and providing contractor contact information. The contact shall be someone with the authority to modify construction activities if best management practices are not implemented as required.
3. Construction activities that could generate high noise levels, such as pile driving, shall be scheduled during times that would have the least impact on occupied residence locations.
4. Stationary construction noise sources, such as temporary generators, shall be located as far from nearby occupied residences as possible.
5. Trucks shall be prohibited from idling along streets serving the construction site where noise-sensitive receptors are located.
6. Outfit construction equipment with properly maintained, manufacturer-approved or recommended sound abatement means on air intakes, combustion exhausts, heat dissipation vents, and the interior surfaces of engine hoods and power train enclosures.
7. Position (to the extent practical) construction laydown and vehicle staging areas as far from noise-sensitive land uses as feasible.
8. If feasible and determined to be an effective option, install temporary noise barriers around the perimeter of the construction area to minimize construction noise.

**MM-NOI-CONS-2:** Applicants for developments streamlining under the Consistency Process requiring use of heavy construction equipment within 2,500 feet of an occupied

residence shall show the inclusion of best management practices in project construction documents, including the Grading Plan and contract with the construction contractor. The County shall ensure that these items are included in project construction documents.

Refer to MM-NOI-OBJ-1, above, for all standards and requirements for MM-NOI-CONS-2.

### *Operational Noise Control*

**MM-NOI-OBJ-3:** For by-right development, the County shall include MM-NOI-OBJ-3 in the by-right housing ordinance. Prior to approval of a grading permit for new development streamlining under the Objective Process, developers shall submit a Noise Screening Package with a description of the project, construction plans, land use maps, and roadway and (if applicable) railroad noise contours. The Noise Screening Package shall provide evidence that the development would not include noise-sensitive receptors proposed in areas exposed to existing or projected noise levels that are higher than "normally acceptable" according to Table S-2 (Land Use Compatibility for Community Noise) in the 2010 General Plan Safety Element (greater than 60 Community Noise Equivalent Level (CNEL) for single-family residences or 65 CNEL for multiple-family residences). A project may be in an area exposed to noise levels above normally acceptable if it is within a roadway or railroad noise contours of 60 CNEL or greater. Roadways that may result in noise levels above 60 A-weighted decibel (dBA) at adjacent properties generally experience greater than 2,200 average daily traffic (ADT) when the posted speed limit is 45 miles per hour (mph), and greater than 7,800 ADT when posted speed limit is 25 mph. Roadways that may result in noise levels above 65 dBA at adjacent properties generally experience greater than 6,000 ADT when the posted speed limit is 45 mph, and greater than 23,000 ADT when posted speed limit is 25 mph. A project adjacent to a roadway meeting these criteria may be exposed to noise levels higher than normally acceptable. The County shall ensure that these items are included in project construction documents.

- If the project cannot submit evidence that it is outside the 60 dBA CNEL or 65 dBA CNEL or greater contour, as applicable, in the Noise Screening Package, an acoustical study shall be prepared for the development by a certified acoustical engineer and submitted to the County prior to approval of grading permit, or if no grading permit is required, prior to beginning earthwork. The acoustical study shall include a description of the existing noise setting and evaluate the potential for the project to expose noise-sensitive receptors to above normally compatible standards. Should the results of the acoustical study indicate that that exterior noise would exceed normally compatible conditions, the certified acoustical engineer shall include a detailed analysis of noise reduction requirements for the project design to

ensure that the interior noise level of any habitable room does not exceed 45 dBA CNEL. The certified acoustical engineer shall require design measures and noise insulation features that may include the following:

  - Acoustical paneling or sound walls
  - Dual pane glass
  - Building location or design
  - Roadway design

- If it is necessary for windows to be able to remain closed to ensure that interior noise levels meet the interior standard of 45 dBA CNEL, the design for these residences shall include ventilation or an air conditioning system to provide a habitable interior environment with the windows closed.

Final project design shall incorporate the design measures and noise insulation features identified by the certified acoustical engineer in the construction of the residential units. The County shall ensure that these items are included in project construction documents.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.13.5.2 Threshold 2: Excessive Groundborne Vibration

**Threshold 2:** Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

### Impact Analysis

Groundborne vibration that would potentially occur through implementation of the HEU6 would result from construction equipment.

#### *Construction*

The FTA thresholds provided in Table 4.13-1 are the applicable significance thresholds for groundborne vibration. The applicable thresholds are 65 VdB at vibration-sensitive land uses and 75 VdB at residences and other buildings. Vibration impacts are measured at the building, rather than property line, because it is the transmission of vibration through the building that would result in a disturbance. Vibration-sensitive land uses include manufacturing uses, hospitals, and research operations where vibration could disrupt the use of essential equipment (FTA 2018). The threshold of 65 VdB is applicable to all vibration-sensitive receptors.

In accordance with the Monterey County Noise Ordinance, construction would only occur during the daytime and would not disturb sleep. However, daytime construction may result in a nuisance to residences. Construction would generally be infrequent because operation of vibration-

generating equipment is anticipated to be intermittent throughout the day within the vicinity of an individual receptor. However, the 75 dBA threshold for occasional events near buildings where people normally sleep is conservatively applied for nuisance impacts to all land uses that are not vibration sensitive, including residences. This is conservative because this threshold is concerned with nuisance impacts to sleep, and construction would be limited to daytime hours.

Typical vibration levels for typical construction equipment that may be required for future projects proposed under the HEU6 are provided in Table 4.13-8, Vibration Source Levels for Typical Construction Equipment. As shown in Table 4.13-8, all vibration levels from all construction equipment would attenuate to below 75 VdB at 110 feet from the source and vibration from construction equipment other than vibratory equipment would attenuate to 75 VdB or below beyond 65 feet from the source. All vibration levels from all construction equipment would attenuate to below 65 VdB at 235 feet from the source, and vibration from construction equipment other than vibratory equipment would attenuate to 65 VdB or below beyond 135 feet from the source.

**Table 4.13-8. Vibration Source Levels for Typical Construction Equipment**

| Construction Equipment | Approximate VdB at 25 Feet | Approximate VdB at 65 Feet[1] | Approximate VdB at 110 Feet[1] | Approximate VdB at 135 Feet | Approximate VdB at 235 Feet |
|---|---|---|---|---|---|
| Large Bulldozer | 87 | 75 | 68 | 65 | 58 |
| Caisson Drilling | 87 | 75 | 68 | 65 | 58 |
| Loaded Trucks | 86 | 74 | 67 | 64 | 57 |
| Small Bulldozer | 58 | 46 | 39 | 36 | 29 |
| Jackhammer | 79 | 67 | 60 | 57 | 50 |
| Vibratory Roller | 94 | 82 | 75 | 72 | 65 |

**Source:** FTA 2018.

**Notes:** VdB = vibration decibel

[1] Based on the formula VdB = VdB (25 feet) – 30log(d/25) provided by the FTA (2018).

Table 4.13-9, Vibration Impact Screening Distances, summarizes the screening distances for potential impacts from vibratory construction equipment and typical construction equipment at vibration-sensitive and non-sensitive uses.

**Table 4.13-9. Vibration Impact Screening Distances**

| Type of Receptor | Screening Distance for Construction Requiring Vibratory Equipment (feet) | Screening Distance for Typical Construction Without Vibratory Equipment (feet) |
|---|---|---|
| Vibration-Sensitive Land Uses | 235 | 135 |
| Non-Sensitive Land Uses | 110 | 65 |

**Source:** FTA 2018 (for source levels and attenuation formula).

As shown in Table 4.13-9, a potential impact would occur if future construction activities would occur within 135 feet of a vibration-sensitive land use if no vibratory construction equipment are

used or 235 feet if vibratory equipment are used. In addition, a potential impact would occur if future construction activities would take place within 65 feet of existing non-sensitive land uses without using any vibratory construction equipment or 135 feet if vibratory equipment are used. Vibration-sensitive land uses are found throughout the UMC, including medical facilities and industrial operations. Because no specific construction is proposed at this time, it cannot be guaranteed that vibration levels would not exceed the thresholds at the nearest vibration-sensitive receptors. Therefore, typical vibration levels for construction equipment resulting from HEU6 implementation, as shown in Table 4.13-8, could exceed the applicable FTA criteria outlined in Table 4.13-1. Construction vibration impacts could be potentially significant.

#### *Operation*

Following construction, future development would consist of residential land uses, which are not typically sources of groundborne vibration. As such, residential land uses accommodated under the HEU6 are not anticipated to generate perceptible levels of groundborne vibration. Therefore, impacts would be less than significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Best practices for groundborne vibration will be required through MM-NOI-OBJ-4 and MM-NOI-CONS-5 below.

**MM-NOI-OBJ-4:** Before the start of construction activities that involves use of a vibratory roller (or equivalent equipment) within 235 feet of a vibration-sensitive land use or within 110 feet of other land uses or the use of typical (not vibratory) construction equipment within 135 feet of a vibration-sensitive land use or within 65 feet of other land uses, the project applicant or project proponent shall retain a qualified acoustician to demonstrate whether vibration would exceed the applicable Federal Transit Administration threshold (65 vibration decibel for vibration-sensitive land uses or 75 vibration decibel for other daytime land uses), and, if applicable, identify best management practices to be implemented by the construction contractor to reduce vibration levels to below the applicable threshold. Vibration-sensitive receptors shall include manufacturing uses, hospitals, and research operations where vibration could disrupt the use of essential equipment, as defined in the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (September 2018). The best management practices shall be included in project construction documents, including the Grading Plan and contract with the construction contractor. The County shall ensure

that these items are included in project construction documents. These best practices shall include the following:

- Notification of vibration-sensitive uses within the screening distances outlined above, by no later than one week prior to the start of construction activities. The notification shall provide contractor contact information for someone with the authority to modify construction activities if best management practices are not implemented as required
- Use of only properly maintained equipment with vibratory isolators
- Operation of construction equipment as far from vibration-sensitive receptors as possible
- Use of rubber-tired construction vehicles only (as opposed to tracked vehicles)

**MM-NOI-CONS-5:** Applicants for developments streamlining under the Consistency Process that would involve use of a vibratory roller (or equivalent equipment) within 235 feet of a vibration-sensitive land use or within 110 feet of other land uses or the use of typical (not vibratory) construction equipment within 135 feet of a vibration-sensitive land use or within 65 feet of other land uses shall retain a qualified acoustician to demonstrate whether vibration would not exceed the applicable Federal Transit Administration threshold (65 vibration decibel for vibration-sensitive land uses or 75 vibration decibel for other daytime land uses), and, if applicable, shall identify best management practices to be implemented by the construction contractor to reduce vibration levels to below the applicable threshold. The best management practices shall be included in project construction documents, including the Grading Plan and contract with the construction contractor. The County shall ensure that these items are included in project construction documents.

Refer to MM-NOI-OBJ-4, above, for all standards and requirements for MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.13.5.3 Threshold 3: Aircraft Noise

**Threshold 3:** For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in exposure of people residing or working in the project area to excessive noise levels?

### Impact Analysis

Airport sources of noise in the Monterey County include Monterey Regional Airport, Salinas Municipal Airport, Marina Municipal Airport, and Mesa Del Rey Airport (County of Monterey 2010). Marina Municipal Airport and Monterey Regional Airport are in the western portion of Monterey County and are within 2 miles of sites in the HEU6. Specifically, Opportunity Sites 31 and 53 are within 2 miles of the Marina Municipal Airport, and Opportunity Sites 46, 47, and 52 are within 2 miles of the Monterey Regional Airport (City of Marina 2006; Monterey County ALUC 2019).

According to Exhibits 2D and 2E of the Marina Municipal Airport's ALUCP, Opportunity Sites 31 and 53 are outside the outermost noise contour (55 CNEL). As such, noise generated by the airport would be less than 55 CNEL at the nearest receptor. Additionally, according to Exhibits 2D and 2E of the Monterey Regional Airport ALUCP, Opportunity Site 46, 47, and 52 are also outside Monterey Regional Airport's outermost noise contour (65 CNEL). Following HEU6 implementation, all opportunity sites would be rezoned as High Density Residential (HDR/25) or HDR/30 with split zoning proposed for certain sites. Opportunity Sites 46 and 47 are proposed to be split zoned to ensure compatibility with airport safety requirements. As such, noise generated by the airport would be less than 65 CNEL at the nearest receptor, consistent with the County's acceptable ambient noise levels for multi-family residential (Table 4.13-6). Therefore, implementation of HEU6 would not result in exposure of people residing or working in the project area to excessive noise levels. Impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation Measures

Less than significant impact.

## 4.13.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to noise that could result from implementation of the project.

### 4.13.6.1 Cumulative Threshold 1: Excessive Noise Levels

A cumulative ambient noise impact would occur if development associated with cumulative regional land use projects would result in an increase in ambient noise that would exceed the County's noise standards. As discussed in Chapter 4, Environmental Analysis, the HEU6 is inherently cumulative

and considers cumulative development that could occur in the planning area over a defined time frame. Development proposed under the cumulative projects would be subject to regulations that require compliance with the Monterey County Noise Ordinance and 2010 General Plan policies. Implementation of the HEU6 and future regional growth, including implementation of required housing element updated for other Monterey County jurisdictions, would result in increases in traffic that would cumulatively increase traffic noise at existing or new sensitive receptors. However, with the existing state and County framework in place under Title 24 of the California Code of Regulations and the 2010 General Plan policies and mitigation measures (MM-NOI-OBJ-1, MM-NOI-CONS-2, and MM-NOI-OBJ-3), future development under the HEU6 and cumulative projects would be required to demonstrate that appropriate noise attenuation has been incorporated into project design to achieve noise compatibility. New sensitive residential development, including under housing element updates for surrounding jurisdictions, would also be subject to Title 24. Therefore, the HEU6 in conjunction with other cumulative development would not result in a cumulatively considerable contribution to a cumulatively considerable impact related to operation noise. Construction noise impacts are localized in nature because they are limited to the construction site where construction equipment is operating. Because projects implemented under the HEU6 would be spread out over time and throughout the planning area, projects are unlikely to overlap and cause a cumulative impact. Therefore, a cumulatively considerable impact would not occur for construction noise.

#### Significance of Impact

Potentially significant impact.

#### Mitigation Measures

Refer to MM-NOI-OBJ-1, MM-NOI-CONS-2, and MM-NOI-OBJ-3.

#### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.13.6.2 Cumulative Threshold 2: Excessive Groundborne Vibration

Similar to noise effects, vibration is a localized phenomenon and is progressively reduced as the distance from the source increases. Therefore, projects that would be considered for the vibration cumulative analysis would be projects close to future individual projects. Because projects implemented under the HEU6 would be spread out over time and throughout UMC, project construction may overlap. However, as discussed in Section 4.13.5.2, other cumulative individual projects in UMC are anticipated to incorporate mitigation measures to reduce vibration impacts to a less than significant level by implementing various best management practices (MM-NOI-OBJ-4 and MM-NOI-CONS-5). Therefore, a cumulatively considerable impact would not occur related to vibration.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-NOI-OBJ-4 and MM-NOI-CONS-5.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.13.6.3 Cumulative Threshold 3: Aircraft Noise

Implementation of the HEU6 would not expose people residing or working in UMC to excessive aircraft noise through consistency with existing plan requirements. In addition, impacts related to nuisance noise from overflights are site-specific and are not cumulative in nature. Therefore, a cumulatively considerable impact would not occur for this issue.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation Measures

Less than significant impact.

## 4.13.7 Conclusion

Temporary impacts due to construction, impacts from operational noise, permanent increases in ambient noise levels from vehicle traffic noise, and exposure of new sensitive receptors to increased vehicle noise would be less than significant with compliance with the Monterey County Noise Ordinance and 1982 and 2010 General Plan Safety Element policies and best management practices in compliance with Chapter 10.60, Noise Control, of the County Code, as outlined under MM-NOI-OBJ-1 and MM NOI-CONS-2. Given that residential projects streamlining under the Objective Process would be processed objectively, these projects may not undergo subsequent environmental review or be evaluated for compliance with Policies S-7.2, S-7.3, S-7.6, and S-7.7 of the 2010 General Plan Safety Element, or 1982 General Plan Policy 22.2.2. Therefore, MM-NOI-OBJ-3 would require preparation of acoustical studies, if required based on location, and incorporation of noise reduction measures in compliance with Policies S-7.2, S-7.3, S-7.6, and S-7.7 of the 2010 General Plan Safety Element, or 1982 General Plan Policy 22.2.2.

Implementation of the HEU6 would not expose people residing or working in the project area to excessive aircraft noise. These impacts would be less than significant.

However, implementation of the HEU6 would have the potential to result in significant groundborne vibration impacts from vibratory and typical construction equipment. Implementation of MM-NOI-OBJ-4 and MM-NOI-CONS-5 would reduce temporary vibration impacts from future construction activities by implementing best management practices to limit groundborne vibration levels during construction at nearby receptors. MM-NOI-OBJ-4 and MM-NOI-CONS-5 would reduce groundborne vibration impacts to less than significant. No significant and unavoidable impacts would remain.

**Figure 4.13-1a. Existing Marina Municipal Airport Noise Contours**

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**Figure 4.13-1b. Future Marina Municipal Airport Noise Contours**

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**Figure 4.13-2a. Existing Monterey Regional Airport Noise Contours**

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**Figure 4.13-2b. Future Monterey Regional Airport Noise Contours**

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# 4.14 Public Services

This section evaluates the potential for impacts related to public services resulting implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts related to the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, and other public facilities. Refer to Section 4.15, Recreation, for a discussion on potential impacts related to parks.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.14.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address public services.

### 4.14.1.1 Federal

#### Disaster Mitigation Act of 2000: Senate Bill 743

The Disaster Mitigation Act of 2000 requires a state-level mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The act also established new requirements for local mitigation plans.

### National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts on communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

#### 4.14.1.2 State

### California Fire Plan

The California Strategic Fire Plan for California (2018) is a cooperative effort between the State Board of Forestry and Fire Protection and California Department of Forestry and Fire Protection (CAL FIRE). The plan serves as the state's road map for reducing the risk of wildfire by emphasizing preventive action before a fire starts. The California Fire Plan reduces firefighting costs and property losses, increases firefighter safety, and contributes to ecosystem health.

### California State Multi-Hazard Mitigation Plan

The purpose of the California State Hazard Mitigation Plan is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. The California State Hazard Mitigation Plan guides hazard mitigation activities, emphasizing partnerships among local, state, and federal agencies, as well as the private sector (Cal OES 2023).

### California Code of Regulations (Title 5)

The California Code of Regulations, Title 5 Education Code, governs all aspects of education in the State of California, and allows school districts to prepare developer fees.

The School Facilities Act of 1986 (California State Assembly Bill [AB] 2926) was enacted and added to California Government Code (CGC; Section 65995) in 1986. It authorizes school districts to collect development fees, based on demonstrated need, and to generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees which may be collected under this and any other school fee authorization are $1.50 per square foot for residential development and $0.25 per square foot for commercial and industrial development.

AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 et seq. to the CGC. Under this statute, payment of statutory fees by developers serves as exclusive mitigation under the California Environmental Quality Act (CEQA) to satisfy the impact of development on school facilities.

### School Facilities Bond Act: California Senate Bill 50 (SB 50)

As part of the further refinement of the legislation enacted under AB 2926, the passage of the School Facilities Bond Act (SB 50) in 1998 defined the needs analysis process in CGC Sections 65995.5

through 65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity because of development. SB 50 generally provides for an equal state and local school facilities match and three levels of statutory impact fees. The application level depends on whether state funding is available; whether the school district is eligible for state funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

CGC Sections 65995 through 65998 implement AB 2926, as amended by SB 50. In accordance with Section 65995(h), the payment of statutory fees is "deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities."

Pursuant to CGC Section 65995(i), "a State or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to section 65995.5 or 65995.7, as applicable."

California Education Code, Section 17620(a)(1), states the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

#### 4.14.1.3 Local

### 2010 General Plan (Inland)

#### *Public Services Element*

The Public Services Element provides policies to address critical infrastructure and service issues. The Element includes requirements for adequate public facilities and services (Policies PS-1.1, PS-1.3, and PS-1.4). Policies PS-1.5 and PS-1.6 ensure adequate public services for new development by calling for an infrastructure phasing plan requiring installation of infrastructure improvements with each phase of new development and allowing only developments that have or can provide adequate public services and facilities. Goal PS-7 and associated Policies PS-7.1 through PS-7.8 relate to the provision of educational facilities and opportunities for existing and future population centers. Additionally, Table PS-1 provides maximum emergency response times for fire and police, and school requirements for the creation of new residential lots based on land type.

### Community Plans

#### *Castroville Community Plan*

Goal 10 and Policies 10.1 and 10.2 support the provision of adequate levels of public services and infrastructure to meet the needs of new and existing development.

### 1982 General Plan (Coastal)

The 1982 Monterey County General Plan (1982 General Plan) presents policies that address wildfire risk in the coastal areas of Monterey County (County of Monterey 1982). Policies 17.1.1 and 17.1.3 encourage community outreach materials at convenient locations from the fire protection agencies and the inclusion of fire protection agencies in the 911 Monterey Countywide telephone emergency system. Policies 17.2.1 and 17.2.2 require continuous updating of fire hazard and fire risk mapping. Policies 17.3.10, 17.3.11, and 17.3.14 provide development standards for access roads and driveways to ensure adequate emergency access. Policy 17.4.4 requires visible house numbers that must be posted when construction begins. Policies 17.6.1 and 17.6.4 encourage coordination with fire protection agencies and CAL FIRE to assure efficient response and to meet peak fire demands.

The 1982 General Plan also addresses emergency services (police) by considering crime prevention techniques and reviewing development proposals. The plan also addresses schools through policies encouraging early planning for enrollment demand, coordination between the County and school districts, and supportive funding.

### Monterey County Code – Inland and Coastal

Chapter 10.80 – Fire Mitigation Fees provides the regulatory framework for assessing and collecting fees at the time of issuance of a building permit to finance the costs of fire protection facilities and equipment necessitated by new development.

## 4.14.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to public services.

### 4.14.2.1 Fire Protection

CAL FIRE is responsible for wildland fire protection for much of UMC. Fire protection services for local responsibility areas in Monterey County is provided by special districts and community service districts including Monterey County Regional Fire Protection District (MCRFPD), Cypress Fire Protection District (FPD), Salinas Rural Fire District, North County FPD, Aromas Tri-County FPD, Pebble Beach Community Service District (contracts with CAL FIRE), Carmel Highlands FPD, Mid-Coast Fire Brigade, Big Sur Volunteer Fire Brigade, South County FPD,

Greenfield FPD, Mission Soledad Rural FPD, and Gonzales Rural FPD (refer to Figure 4.14-1, Fire Protection Districts in Monterey County). Several districts, such as the MCRFPD, participate in a mutual aid system in the region to ensure the response of additional resources as needed (MCRFPD 2024). Aromas Tri-County, Cachagua, Cypress, and South Monterey County FPDs contract with CAL FIRE to provide wildland fire protection in their state responsibility area zones (Table 4.14-1, Fire Protection Districts).

**Table 4.14-1. Fire Protection Districts**

| Fire Protection Districts | Opportunity Sites |
|---|---|
| Monterey County Regional FPD | 1 through 6, 23 through 29, 31, 36, 38, 46, 47, 52, 55, 56 |
| Cypress FPD | 16 through 22, 35, 37, 40, 43, 45, 52, 54 |
| North County FPD | 8 through 15, 30, 39, 41,44, 48 through 51, 64 |
| South County FPD | 32, 33, 34, 42 |

**Note:** FPD = Fire Protection District

### 4.14.2.2 Police Protection

The Monterey County Sheriff's Office provides law enforcement services to the UMC and consists of three primary bureaus: Administrative Operations, Corrections Operations, and Enforcement Operations (Monterey County Sheriff's Department 2024). The Sheriff's Office comprises approximately 324 paid employees and 165 civilian employees, and has three main patrol stations: Central Station at 1414 Natividad Road in the City of Salinas, Coastal Station at 1200 Aguajito Road in the City of Monterey, and the South County Station at 250 Franciscan Drive in King City. Figures 4.14-2a through 4.14-2i, Sheriff Beat Areas, illustrate beat areas that cover UMC. Although not delineated in the figure, the Cities of Soledad, Seaside, Sand City, Salinas, Pacific Grove, Monterey, Marina, King City, Greenfield, Gonzales and Carmel-by-the-Sea have their own police departments. Table 4.14-2, Sheriff's Office Beat Number for Opportunity Sites, identifies which beat number the opportunity sites fall within.

**Table 4.14-2. Sheriff's Office Beat Number for Opportunity Sites**

| Police Beat | Opportunity Sites | Police Beat | Opportunity Sites |
|---|---|---|---|
| 1A | 49, 50, 51, 64 | 6B | 16, 40, 43, 45, 46, 52 |
| 1B | 48, | 7 | 17, 18, 19, 20, 21, 22, 35, 37, 54, |
| 2B | 11, 12, 13, 14, 15, 30, 41 | 8A | 23, 36, 38, 56 |
| 2C | 44 | 8B | 55 |
| 3A | 1, 2, 3, 4, 8, 9, 10, 39 | 11 | 32, 33, 34, 42 |
| 4A | 5, 6, 24 | Outside Monterey County Sheriff Jurisdiction | 31 (California State University), 53 (City of Marina Police), 47 (Fort Ord) |
| 4B | 24 | | |
| 5 | 25, 26, 27, 28, 29 | | |

### 4.14.2.3 Schools

The UMC is served by the 31 public school districts as shown on Figure 4.14-3, Monterey County K-12/High School District Boundaries, and Figure 4.14-4, Monterey County Elementary School District Boundaries. These school districts are composed of 11 unified (K-12) school districts, two high school only districts, and 17 elementary school districts. Of these school districts, 24 school districts are overseen by the Monterey County Office of Education, and other school districts cross jurisdictional boundaries of Monterey County, including San Luis Obispo, San Benito, and Santa Cruz Counties. Opportunity sites are distributed in 14 school districts as shown in Table 4.14-3, Monterey County School Districts Serving Opportunity Sites, and the number of schools and student enrollment in those school districts for the past three school years are provided in Table 4.14-4, School District Characteristics and Enrollment Trends in Monterey County.

**Table 4.14-3. Monterey County School Districts Serving Opportunity Sites**

| K-12 or High School Districts | Elementary School Districts | Opportunity Sites |
|---|---|---|
| Salinas Union High | Santa Rita Union | 1 through 4 |
| Salinas Union High | Salinas City | 5, 6 |
| Salinas Union High | Spreckels Union | 24 |
| Salinas Union High | Washington Union | 46 |
| Monterey Peninsula USD | N/A | 31, 40, 45, 46, 47, 52, 53 |
| North Monterey County USD | N/A | 8 through 15, 30, 39, 41, 44 |
| Carmel USD | N/A | 16 through 23, 35 through 38, 43, 54, 55, 56 |
| Gonzales USD | Chualar Union | 25 through 29 |
| South Monterey County Joint Union | San Lucas Union | 32, 33, 34 |
| South Monterey County Joint Union | King City Union | 42, |
| Pajaro Valley USD | N/A | 48 through 51, 64 |

**Source:** County of Monterey GIS Data 2025.

**Table 4.14-4. School District Characteristics and Enrollment Trends in Monterey County**

| School Districts | District Type | Number of Schools | Total Enrollment | | |
|---|---|---|---|---|---|
| | | | 22/23 | 23/24 | 24/25 |
| Carmel USD | TK–12 | 6 schools: 3 ES, 1 MS, 1 HS, 1 alternative/adult education | 2,274 | 2,159 | 2,157 |
| Gonzales USD | TK–12 | 3 Schools: 1 ES, 1 MS, 1 HS | 2,110 | 2,017 | 1,962 |
| Monterey Peninsula USD | TK–12 | 16 Schools: 7 ES, 3 TK-8, 2 MS, 3 HS, 1 Alt Ed. | 9,809 | 9,836 | 9,949 |
| North Monterey County USD | TK–12 | 8 Schools: 4 ES, 1 MS, 1 HS, 2 Cont HS/Independent Study | 4,483 | 4,435 | 4,290 |
| Pajaro Valley USD | TK–12 | 32 Schools: 20 ES, 6 MS, 3 HS, 3 Cont HS/Alt School | 17,963 | 17,520 | 17,089 |
| South Monterey County Joint | 9–12 | 4 Schools: 3 HS, 1 Cont. HS | 2,762 | 2,731 | 2,666 |
| Salinas Union High | TK–12 | 12 Schools: 5 MS, 6 HS, 1 Community Day Program | 16,337 | 16,225 | 15,813 |

**Table 4.14-4. School District Characteristics and Enrollment Trends in Monterey County**

| School Districts | District Type | Number of Schools | Total Enrollment | | |
|---|---|---|---|---|---|
| | | | 22/23 | 23/24 | 24/25 |
| Santa Rita Union | TK–8 | 6 Schools: 4 ES, 2 MS, | 3,231 | 3,186 | 3,088 |
| Salinas City | TK–6 | 15 ES | 8,273 | 8,206 | 8,236 |
| Spreckels Union | TK–8 | 2 Schools: 1 ES, 1 MS | 918 | 888 | 850 |
| Washington Union | TK–8 | 3 ES | 734 | 746 | 756 |
| Chualar Union | TK–8 | 1 ES | 278 | 262 | 234 |
| San Lucas Union | TK–8 | 1 ES | 70 | 78 | 72 |
| King City Union | TK–8 | 4 Schools: 2 ES, 1 MS, 1 Magnet | 2,578 | 2,552 | 2,554 |
| | | **Monterey County Total** | **73,643** | **72,872** | **72,224** |

**Source:** Monterey County Office of Education 2025.
**Notes:** ES = elementary school; HS = high school; MS = middle school

### 4.14.2.4 Other Public Facilities

Other public facilities that could be affected by project implementation include libraries. The County operates 17 public libraries in total as part of the Monterey County Free Libraries system (Monterey County Free Libraries 2024), and the incorporated Cities of Carmel and Monterey also have their own public libraries that are in proximity to the project, as shown in Table 4.14-5, List of Monterey County Public Libraries.

**Table 4.14-5. List of Monterey County Public Libraries**

| Library Branch | Opportunity Sites |
|---|---|
| Aromas Branch | N/A |
| Big Sur Branch | N/A |
| Bradley Branch | N/A |
| Buena Vista Branch | 24 |
| Carmel Valley Branch | 17, 18, 19, 20, 21, 22, 23, 35, 36, 38, 54, 55, 56 |
| Castroville Branch | 11, 12, 13, 14, 15, 30, 41 |
| East Garrison Branch* | Not yet constructed. |
| Gonzales Branch | 25, 26, 27, 28, 29 |
| Greenfield Branch | N/A |
| King City Branch | 42 |
| Marina Branch | 31, 53[1] |
| Pajaro Branch | 48, 49, 50, 51, 64 |
| Parkfield Branch | N/A |
| Prunedale Branch | 8, 9, 10, 44 |
| San Ardo Branch | N/A |
| San Lucas Branch | 32, 33 |

**Table 4.14-5. List of Monterey County Public Libraries**

| Library Branch | Opportunity Sites |
|---|---|
| Seaside Branch | 46, 47, 52 |
| Soledad Branch | N/A |

**Note:**

[1] Once constructed, the East Garrison Branch will be the closest library to sites 31 and 53.

Opportunity Sites 40 and 45 are closest to the Monterey Public Library. Opportunity Sites 16 and 43 are near the Carmel Public Library. Opportunity Sites 1, 2,3, and 4 are closest to the City of Salinas Public Library system.

Monterey County Free Libraries is a member of the Monterey Bay Area Cooperative Library System, a collaborative consortium that includes both municipal and county library systems in Monterey, Santa Cruz, and San Benito Counties. Surrounding cities such as Monterey, Pacific Grove, and Salinas operate independent library systems, which are also part of the Monterey Bay Area Cooperative Library System.

## 4.14.3 Method of Analysis

The analysis of environmental impacts related to public services considers the potential need for new or expanded governmental facilities to maintain performance standards resulting from the increase in demand for these services due to implementation of the project, including fire protection, police protection, schools, and other public facilities (libraries).

The analysis contained herein addresses potential impacts related to public services from a programmatic-level and countywide approach, recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC would be facilitated by the project through identification and rezoning to encourage residential development. Where appropriate and possible, individual opportunity sites are discussed.

## 4.14.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on public services if it would:

- **Threshold 1:** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire protection
  - Police protection

- Schools
- Other public facilities

Refer to Section 4.15 for a discussion of impacts on parks.

## 4.14.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to public services that could result from implementation of the project.

### 4.14.5.1 Threshold 1: Physical Impacts from the Provision of Public Services Facilities to Maintain Performance Standards

**Threshold 1:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Other public facilities?

#### Impact Analysis

##### *Fire Protection*

The project would facilitate the development of additional housing units to meet the Regional Housing Needs Allocation (RHNA) mandate. The opportunity sites in the HEU6 were selected due to their proximity to areas identified as Community Areas or Rural Centers in the Monterey County General Plan (2010 General Plan) where development already exists. Other opportunity sites were selected due to their proximity to incorporated cities and existing services in UMC. The County looked to areas with existing development to plan for housing growth. As noted above in Table 4.14-1, opportunity sites are in an existing Fire Protection District. The project consists of an updated housing program for which no actual development is proposed as part of the update. However, the project would require rezoning that would allow for greater densities than currently allowed in the UMC. Therefore, the project would increase the demands on fire protection and emergency services. While the HEU6 includes a range of programs and policies to aggressively address existing development constraints to meet the County's Sixth Cycle RHNA goals during the 2023–2031 Planning Period, past development trends from the Fifth Cycle included 1,848 housing units constructed in the 2015–2023 Planning Period. While the County is committed to making adequate

sites available to accommodate the County's RHNA obligations, these development trends indicate that buildout anticipated in the HEU6 may occur over a longer period of time.

However, there are various existing regulatory processes that would serve to minimize impacts associated with fire protection facilities. Specifically, the Monterey County Code (County Code), Chapter 10.80, Fire Mitigation Fees, includes a provision for assessing and collecting fees at the time of issuance of a building permit to finance the actual or estimated costs of fire protection facilities and equipment necessitated by new development. The purpose of Fire Mitigation Fees is to finance future fire protection facilities and fire capital expenditures required because of new development in the fire district. County Code of Ordinances, Section 10.80.110 (County Process), outlines the process by which each fire district establishes a fire mitigation fee for the UMC in the service area of the fire or community service district that provides fire protection services in the UMC. Currently, the MCRFPD and Cypress FPD have established Fire Mitigation Fees pursuant to the County Code of Ordinances, Chapter 10.80. In 1988, Monterey County voters approved Measure A, an advisory measure supporting the establishment of a countywide paramedic emergency medical services program. Subsequent to Measure A, Local Agency Formation Commission (LAFCO) adopted Resolution 89-8, which formed County Services Area (CSA 74) "with the purpose of providing ambulance service, including the emergency medical services (EMS) system pursuant to Division 2.5 of the California Health and Safety Code." The Monterey Countywide EMS program would be responsible for providing advanced life support in response to emergency calls originating in Monterey County. The 1996 passage of Proposition 218 required that the issue be returned to the voters for approval of the benefit assessment, which occurred in March 2000. The Paramedic EMS special tax is now assessed at $12.00 per service unit on every parcel in Monterey County (LAFCO 2012). The MCRFPD provides medical and ambulance services within the former boundaries of the Carmel Valley FPD (LAFCO 2012). In addition to CSA 74 funding available for EMS, voters approved a separate emergency response services assessment under Proposition 218 for the North County FPD. Additionally, a local fire protection agency in the State of California's state responsibility area is required to pay the annual CAL FIRE Fire Prevention Fee.

New buildings would be required to comply with the latest California Fire Code (California Code of Regulations, Title 24, Part 9) to ensure all development provides the most current fire prevention and safety standards. Additionally, the 2010 [1] stipulates the following policies to reduce impacts on public facilities, including fire services (refer to Section 4.19, Wildfire, for the full regulatory setting related to fire hazards and protection):

[1] The Safety Element is currently being updated. https://www.countyofmonterey.gov/government/departments-a-h/housing-community-development/planning-services/advance-planning/ordinances-plans-under-development/general-plan-elements-updates.

- **S-6.1** The availability of sheriff, ambulance, and fire services, resources personnel and equipment shall be considered prior to approving the creation of new lots or the intensification of use on an existing lot, pursuant to Table PS-1 (Public Services Element).
- **S-6.2** The provision of services shall be prioritized to give the highest priority to areas where the highest concentrations of people reside.
- **S-6.3** A Development Impact Ordinance shall be established to provide adequate protection coverage and emergency services (sheriff, fire, etc.) facilities consistent with State law and the standards in Table PS-1 (Public Services Element).
- **S-6.4** Establishment of new or expansion of existing Community Areas shall not be allowed in areas where emergency response times would exceed the standards in Table PS-1 (Public Services Element).
- **S-6.5** Service level goals for fire and ambulance/emergency service are:
  a. 8 minutes or less, 90% of the time in urban areas and Community Areas;
  b. 12 minutes or less, 90% of the time in suburban areas and Rural Centers;
  c. 45 minutes or less, 90% of the time in rural areas (areas not included in a or b above). (See Policy S-5.11).
- **S-6.6** Informational brochures regarding the levels of fire and ambulance/emergency service available throughout the County may be developed.
- **S-6.7** Public safety measures, including sequential house numbering, non-repetitive street naming, standardized lettering of house numbers in subdivision design, lighting, and park designs, that allow for adequate view from streets shall be included in the design and construction of new development.
- **S-6.8** Efforts to reduce crimes and fires through greater application of neighborhood, rural, and industrial crime prevention techniques, and fire prevention education programs, shall be encouraged.

Additionally, the 2010 General Plan Public Services Element Policy PS-1.1 requires that adequate public facilities and services (APFS) needed to support new development are available to meet or exceed the level of service of "Infrastructure and Service Standards" (Table PS-1) concurrent with the impacts of such development. Table PS-1 of the Public Services Element identifies a maximum emergency response time standard of 5 to 8 minutes for structural coverage in community areas; 12 minutes for structural coverage in rural centers, and 45 minutes in public, agriculture, and rural lands. Furthermore, the following Public Services Element policies stipulate that no discretionary application for new development will be approved unless the County finds that APFS are provided and requires a fair share of the cost to provide adequate services, including fire services.

- **Policy PS-1.3** states that no discretionary application for new development shall be approved unless the County finds that adequate public facilities and services for that use exist or will be provided concurrent with the development.

- **PS-1.4** New development shall pay its fair share of the cost of providing APFS to serve the development.
- **PS-1.6** Only those developments that have or can provide adequate public services and facilities shall be approved.

As shown in Table 4.14-6, Housing Element Opportunity Sites Emergency Response Times, the County's opportunity sites are within adequate distance of an existing fire station to ensure adequate response times as noted in 2010 General Plan Policy PS-1. While not regulated by the 2010 General Plan, Sites 13, 16, and 48 are included to show that the sites are in proximity to existing fire district stations and are consistent with the intent of the below mentioned 1982 General Plan, North County Land Use Plan, and Carmel Area Land Use Plan policies. Although all opportunity sites would meet the emergency response standard based on location and responding fire station, actual emergency response may be affected by localized congestion on roadways, especially in more rural areas. Refer also to Section 4.19 for an analysis regarding potential impacts related to evacuation.

**Table 4.14-6. Housing Element Opportunity Sites Emergency Response Times**

| Fire District | Opportunity Site(s) | Responding Fire Station | Emergency Response Standard | Meets Standard? |
|---|---|---|---|---|
| Monterey County Regional | 1 through 4 | Fire Station 6 (contract with City of Salinas Fire) | Suburban Standard/Rural Center (12 minutes) | Yes |
| | 5 and 6 | Fire Station 2 (contract with City of Salinas Fire) | Urban Standard/Community Area (5 to 8 minutes) | Yes |
| | 23, 36, 38, and 56 | Mid Carmel Valley Fire Station | Suburban Standard/Rural Center (12 minutes) | Yes |
| | 24 | Toro Fire Station | Suburban Standard/Rural Center (12 minutes) | Yes |
| | 25 through 29 | Chualar Fire Station | Urban Standard/Community Area (5 to 8 minutes) | Yes |
| | 31 | East Garrison Station 7 | Urban Standard/Community Area (5 to 8 minutes) | Yes |
| | 47 and 52[1] | Laureles Station | Suburban Standard/Rural Center (12 minutes) | Yes[1] |
| | 55 | Village Fire Station | Suburban Standard/Rural Center (12 minutes) | Yes |
| Cypress | 16 through 22, 35, 37, 52[1], and 54 | Cypress Fire Station 25 | Urban Standard/Community Area (5 to 8 minutes) | Yes[1] |
| | 40, 43, 45 and 46 | Cypress Fire Station 28 | Sites 40, 45, and 46: Suburban Standard/Rural Center (12 minutes)<br>Site 43: Urban Standard/Community Area (5 to 8 minutes) | Yes |

**Table 4.14-6. Housing Element Opportunity Sites Emergency Response Times**

| Fire District | Opportunity Site(s) | Responding Fire Station | Emergency Response Standard | Meets Standard? |
|---|---|---|---|---|
| North County | 8 through 10, 39, and 44 | North County Fire Station 2 | Suburban Standard/Rural Center (12 minutes) | Yes |
| | 11 through 15, 30, 41 | North County Fire Station 1 | Urban Standard/Community Area (5 to 8 minutes) | Yes |
| | 48 through 51 and 64 | North County Fire Station 3 | Urban Standard/Community Area (5 to 8 minutes) | Yes |
| South County | 32 through 34 and 42 | Pine Canyon Fire Station | Suburban Standard/Rural Center (12 minutes) | Yes |

**Notes:**

[1] Site 52 is in both Monterey County Regional and Cypress FPDs. Assuming the site is served by Monterey County Regional, this site meets the emergency response standard.

Additionally, the 1982 General Plan, North County Land Use Plan, and Carmel Area Land Use Plan provide the following policies and objectives to reduce impacts on public facilities, including fire services (refer to Section 4.19 for the full regulatory setting related to fire hazards and protection):

- **Policy 17.1.1** The County should encourage fire protection agencies to provide communities they serve with printed material on local fire hazards and how each community can be protected. This information should be continually available at the local fire station, local library, and other convenient locations.
- **Policy 17.3.3** The County shall encourage all new development to be located within the response time of 15 minutes from the fire station responsible for serving the parcel. If this is not possible, on-site fire protection systems (such as fire breaks, fire-retardant building materials, and/or water storage tanks) approved by the fire jurisdiction must be installed or development may only take place at the lowest density allowed for the parcel by the General Plan.
- **Policy 17.3.6** All new development located within a 15-minute response time from a fire station shall be required to annex to the appropriate fire district.
- **Policy 17.6.1** The County should encourage fire protection agencies to enter into mutual and/or automatic aid agreements to assure the most efficient response.
- **Policy 17.6.3** The County should give priority to high or very high fire hazard areas within the urban service area when planning expansion of fire protection facilities and equipment.
- **Objective 19.1** Ensure a fast, efficient, and coordinate response by public and private agencies to major emergencies.
- **Policy 46.1.1** The County, in cooperation with LAFCO and other appropriate special districts, shall study and encourage the most cost-effective alternative of providing fire protection services while maintaining or improving fire protection service levels in the County.

Additionally, per North County Land Use Plan Specific Policy 2.8.3.C.7 and Carmel Area Land Use Plan Specific Policy 2.7.4.1 (Fire Hazards), Monterey County should support the efforts of the various fire protection agencies and districts to identify and minimize fire safety hazards to the public.

Therefore, although increased density from the rezoning and subsequent project development could incrementally increase demand for fire protection services compared to existing conditions, specific development projects would be required to comply with the California Fire Code, County Code, and applicable General Plan and/or Coastal Implementation Plan policies to reduce potential fire services impacts. County Housing and Community Development Department would review and approve these projects in coordination with responsible fire protection districts. Furthermore, in addition to the property taxes that generally support funding for various fire protection districts and county service areas, each development project would pay applicable fire mitigation, fire prevention, and special assessment fees to further reduce fire service impacts. Where required, the expansion of existing fire protection facilities or the construction of new fire protection facilities would be subject to subsequent environmental review under the CEQA process to ensure direct impacts of specific new or expanded stations would be mitigated to the greatest extent feasible. CAL FIRE, MCRFPD, and local fire districts could require new or expanded fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives. However, these incremental facility changes are not anticipated to result in substantial adverse physical impacts.

Compliance with relevant fire code and payment of impact fees would be required of developments streamlining under the Objective Process and Consistency Process through implementation of mitigation measure (MM)-PS-OBJ-1 and MM-PS-CONS-2. With implementation of MM-PS-OBJ-1 and MM-PS-CONS-2, as well as compliance with all applicable regulations pertaining to fire protection, impacts related to the provision of fire protection facilities would be less than significant.

### *Police Protection*

The project would require rezoning that would allow for greater densities than currently allowed under the existing zoning. The opportunity sites in the HEU6 were selected due to their proximity to areas identified as Community Areas or Rural Centers in the 2010 General Plan were development already exists. Other opportunity sites were selected due to their proximity to incorporated cities and existing services in UMC. The County looked to areas with existing development to plan for housing growth. As noted above in Table 4.14-2, opportunity sites are within sheriff beat areas, in three sites in areas under separate law enforcement jurisdiction. The project could potentially increase the demands on sheriff services in the UMC. The project could result in up to 4,910 housing units and an additional 14,239 people, as discussed in Section 7.2, Population and Housing. However, the project is a policy document that would facilitate the development of additional housing units to meet the RHNA mandate. No actual development is proposed as part of the program update. The housing development would occur incrementally

throughout the UMC, increasing the population, which could result in a greater demand for sheriff officers and facilities. While the HEU6 includes a range of programs and policies to aggressively address existing development constraints to meet the County's Sixth Cycle RHNA goals during the 2023–2031 Planning Period, past development trends from the Fifth Cycle included approximately 1,848 housing units constructed in the 2015–2023 Planning Period. While the County is committed to making adequate sites available to accommodate the County's RHNA obligations, these development trends indicate that buildout anticipated in the HEU6 may occur over a longer period of time.

New or expanded sheriff stations could be required to meet the increased demand from the development of housing units. However, 2010 General Plan Public Services Element Policies S-6.1 through S-6.8 and Public Services Element Policies PS-1.1 through PS-1.6 provide general standards designed to protect environmental resources and the provision of adequate public facilities, including sheriff services. Compliance with these policies would be required for developments streamlining under the Objective Process and Consistency Process. In addition, the North County Land Use Plan requires residential development to consider the availability of public services per Specific Policies 4.3.6.D.1, 2, and 6. Carmel Area Land Use Plan also requires public uses and services be maintained and upgraded as needed, as noted in Specific Policy 4.4.3.J.1. Therefore, compliance with the applicable 2010 General Plan and/or Local Coastal Plan policies would ensure that APFS, including sheriff services, are provided commensurate with development. Any future demand for additional sheriff services as a result of the project would be funded through the County's annual budget review and allocation, as well as various federal or state funds and grants. Furthermore, if new or expanded sheriff facilities are determined to be necessary, they would be subject to subsequent environmental review and impact mitigation per CEQA to ensure that new or expanded facilities do not cause significant environmental impacts. Impacts would be less than significant.

### *Schools*

As shown in Table 4.14-7, Project Student Population Growth, an addition of 4,910 housing units[2] is projected to generate approximately 1,360 K–12 students.

[2] As described in Chapter 3, for this CEQA analysis, a total capacity of 4,910 housing units on 57 opportunity sites is assumed. However, it should be noted that additional capacity for 1,830 units would be accommodated through alternative methods—pipeline sites and accessory dwelling units—that could be developed independently of the HEU6. Furthermore, as discussed in Section 7.3, the majority of the population served by the new housing developments is likely already served by a school district in Monterey County.

**Table 4.14-7. Project Student Population Growth**

| School District | Elementary School Districts | Opportunity Sites | Housing Units | Generation Factor | Generated Students |
|---|---|---|---|---|---|
| Salinas Union High | Santa Rita Union | 1 through 4 | 867 | 0.32 | 198.52 |
| Salinas Union High | Salinas City | 5, 6 | 31 | 0.32 | 7.10 |
| Salinas Union High | Spreckels Union | 24 | 146 | 0.32 | 122.88 |
| Salinas Union High | Washington Union | 46[2] | 46 | 0.32 | 14.72 |
| Monterey Peninsula USD | N/A | 31, 40, 45, 46[2], 47, 52, 53 | 1,915 | 0.32 | 688.96 |
| North Monterey County USD | N/A | 8 through 15, 30, 39, 41, 44 | 557 | 0.8178 | 127.54 |
| Carmel USD | N/A | 16 through 23, 35 through 38, 43, 54, 55, 56 | 543 | 0.22897 | 124.33 |
| Gonzales USD | Chualar Union | 25 through 29 | 128 | 0.32 | 29.31 |
| South Monterey County Joint | San Lucas Union | 32, 33, 34 | 24 | 0.32 | 5.50 |
| South Monterey County Joint | King City Union | 42 | 27 | 0.32 | 6.18 |
| Pajaro Valley USD | N/A | 48 through 51, 64 | 150 | 0.32 | 34.35 |
| | | **Total Students** | **4,434** | **Varies** | **1,359.39** |

**Source:** Total School Solutions 2022, Woolpert, Inc. 2024, Schoolworks, Inc. 2025.

**Notes:**

[1] This table assumes a student generation factor based on the 2022 Developer Fee Justification Document for Monterey Peninsula Unified School District, except the North Monterey County USD and Carmel USD as the most housing units fall within the Monterey Peninsula Unified School District boundaries (2,153 housing units). This represents an average generation factor for various districts in the County, considering that student generation factors vary even within the same school district depending on service areas. For example, Salinas Union High School District has a student generation factor of 0.117 within that school district's 9–12 service area and 0.217 within the 7–12 service area.

[2] Opportunity Site 46 falls within two school districts; therefore, units on this site have been equally split into two to avoid double-counting.

Although most of the school districts in Monterey County are experiencing a decline in enrollment, as shown in Table 4.14-4, implementation of the project could contribute to a potentially significant adverse impact on school facilities and services. However, each development project would be developed incrementally and is required to pay school impact fees pursuant to Senate Bill (SB) 50. The required payment of fees pursuant to SB 50 as authorized in Education Code, Section 17620, or CGC Section 65995, is considered full and complete mitigation for school impacts under CEQA. While the HEU6 includes a range of programs and policies to aggressively address existing development constraints to meet the County's Sixth Cycle RHNA goals during the 2023–2031 Planning Period, past development trends from the Fifth Cycle included 1,848 housing units constructed in the 2015–2023 Planning Period. While the County is committed to making adequate sites available to accommodate the County's RHNA obligations, these development trends indicate that buildout anticipated in the HEU6 may occur over a longer period of time. Furthermore, County Code, Chapter 19.12.015 (which applies to both inland and coastal areas), provides requirements for dedication of land, payment of fees, or dedication of facilities,

as a condition of approval for subdivision of residential development projects in attendance areas where the County has concurred with the responsible school district and finding that overcrowding exists (County of Monterey 2024a). Therefore, development processed under the HEU6 would be required to pay impact fees to the respective school district, pursuant to SB 50, and potentially dedication of land, payment of fees, or dedication of facilities, as a condition of approval for subdivision of residential development projects, pursuant to County Code, Chapter 19.12.015. Furthermore, where required, the expansion of existing schools or the construction of new school facilities would be subject to subsequent environmental review under the CEQA process to ensure direct impacts of specific new or expanded schools would be mitigated to the greatest extent feasible. To reduce potential impacts related to the provision of schools, MM-PS-OBJ-3 and MM-PS-CONS-4 would require developments streamlining under the Objective Process and Consistency Process to pay applicable school development impact fees. With implementation of MM-PS-OBJ-3 and MM-PS-CONS-4, impacts would be less than significant.

#### *Other Public Facilities*

The project proposes buildout over the planning period to satisfy housing needs during the Sixth Housing Element Cycle and would not result in a substantial increase in total library service population. According to the U.S. Census Bureau's American Community Survey, which tracks geographical movement over the past year, the 5-year average estimate for 2023 data indicates that an estimated 40,103 (9.7 percent) of the 411,511 Monterey County residents moved, while the remainder stayed in the same residence. Of the 40,103 people, 21,824 people (54 percent) moved within Monterey County, and others moved to a different county or state. Based on this geographical mobility trend, it is anticipated that the majority of additional population generated by the project would consist of the existing population, who are already being served by Monterey County Free Libraries or other library systems in Monterey County. Furthermore, the County's library system provides a range of electronic and digitized resources that do not require physical library space. Therefore, no new or expanded library facilities would be required to support the project, and impacts would be less than significant.

### Significance of Impact

Potentially significant impact for fire protection and schools.

Less than significant impact for police protection and libraries.

### Mitigation Measures

Payment of fire impact fees, compliance with applicable fire codes, and payment of applicable school development impact fees will be required for all projects streamlining under the HEU6 through MM-PS-OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4 below. The by-

right housing ordinance requires implementation of MM-PS-OBJ-1 and MM-PS-OBJ-3 for future by-right development projects that will be streamlined under the Objective Process.

**MM-PS-OBJ-1: Fire Protection Services.** Prior to the issuance of a construction permit, applicants for by-right residential developments streamlining under the Objective Process shall be required to complete the following:

- Demonstrate project compliance with the California Fire Code and other applicable local regulations through plan review and approval by the fire authority having jurisdiction.
- Pay any applicable fire development impacts fees and provide proof of payment to the County of Monterey.

**MM-PS-CONS-2: Fire Protection Services.** Prior to the issuance of a construction permit, applicants for developments streamlining under the Consistency Process shall be required to complete the following:

- Demonstrate project compliance with the California Fire Code and other applicable local regulations through plan review and approval by the fire authority having jurisdiction.
- Pay any applicable fire development impacts fees and provide proof of payment to the County of Monterey.

**MM-PS-OBJ-3: School Development Impact Fees.** County of Monterey staff shall provide notification to the applicable school district at the time of project application submittal. Prior to the issuance of a construction permit, applicants for by-right residential developments streamlining under the Objective Process shall pay applicable school development impact fees required by the applicable school district and provide proof of payment to the County of Monterey.

**MM-PS-CONS-4: School Development Impact Fees.** County of Monterey staff shall provide notification to the applicable school district at the time of project application submittal. Prior to the issuance of a construction permit, applicants for developments streamlining under the Consistency Process shall pay applicable school development impact fees required by the applicable school district and provide proof of payment to the County of Monterey.

## Significance of Impact After Mitigation

Less than significant impact with payment of fire impact fees, compliance with applicable fire codes, and payment of applicable school development impact fees and mitigation incorporated for fire protection and schools.

Less than significant impact for police protection and libraries.

## 4.14.6 Cumulative Impacts

The following section addresses various potential cumulative impacts relating to public services that could result from implementation of the project. Refer to Chapter 4, Environmental Analysis, for further discussion of the methodology used for the cumulative analysis.

### 4.14.6.1 Cumulative Threshold 1: Physical Impacts from the Provision of Public Services Facilities to Maintain Performance Standards

Cumulative impacts on public services could occur if the project, in combination with other cumulative projects, required the provision of new or expanded public services facilities, the construction of which resulted in significant impacts on the environment. As described in Section 4.14.5.1, with implementation of MM-PS-OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4, all residential projects streamlining under the HEU6 would require compliance with applicable fire codes and payment of applicable fire and school development fees. Just as future development facilitated by the project would be required to comply with the state and County requirements for public services provision, it is reasonable to assume that cumulative projects would be subject to the same or similar standards and review by the applicable fire authority, police department, school district, and other public facility providers. Public services providers develop long-term planning and budgeting projections informed by known and anticipated changes in demand. Where required, the expansion of existing public facilities or the construction of new public facilities would be subject to subsequent environmental review under the CEQA process to ensure direct impacts of specific new or expanded public facilities would be mitigated to the greatest extent feasible. With implementation of the project mitigation measures and compliance with state and County requirements, the project would not contribute to impacts related to public services. Therefore, cumulative impacts on the provision of public services facilities would be less than significant.

#### Significance of Impact

Less than significant impact.

#### Mitigation Measure

No mitigation measures are required.

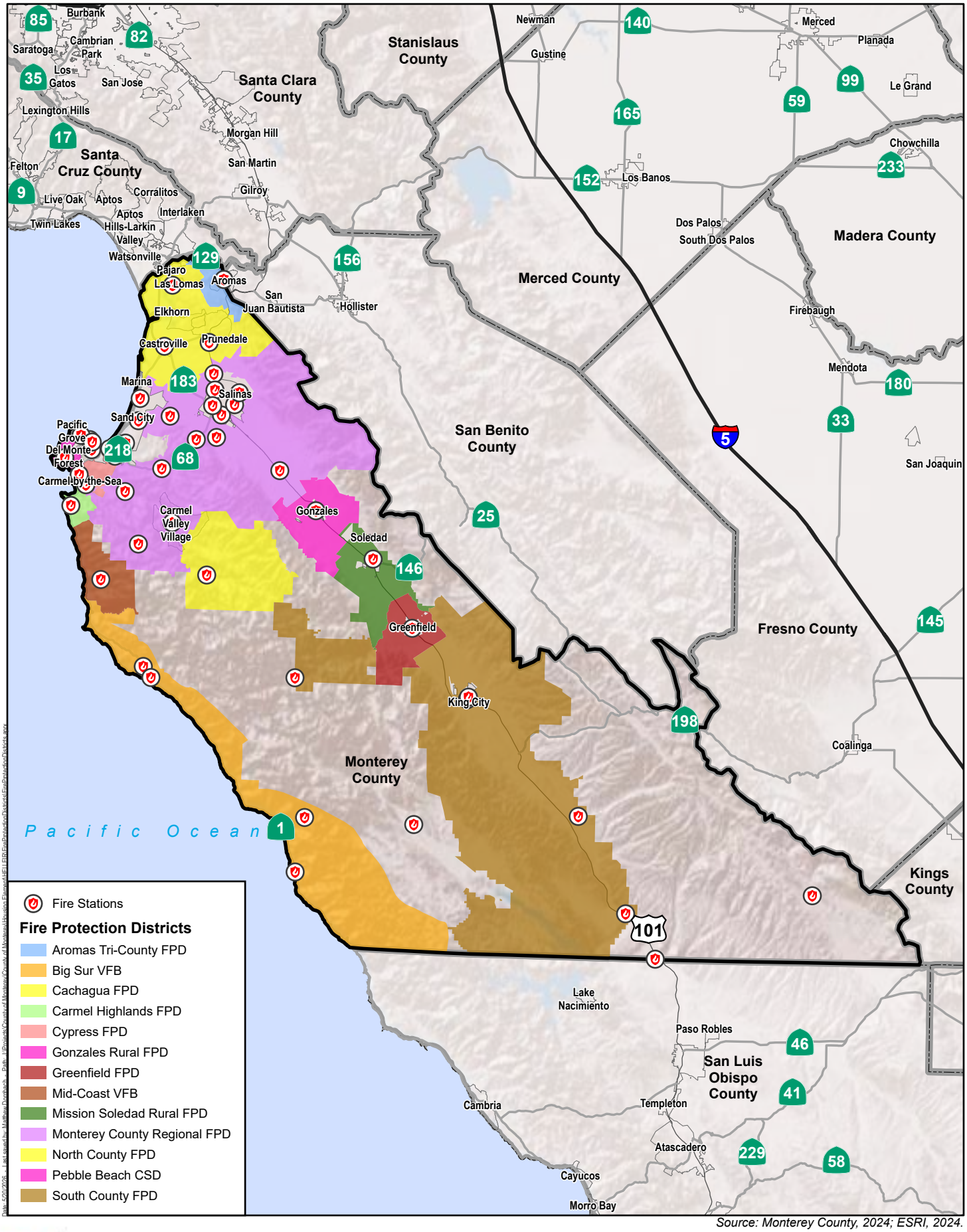
#### Significance of Impact After Mitigation

Less than significant impact.

### 4.14.7 Conclusion

Implementation of MM-PS-OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4 would reduce potential impacts pertaining to fire protection and schools to a less than significant level.

Implementation of the project would result in less than significant impacts pertaining to police protection and other public facilities.




*Source: Monterey County, 2024; ESRI, 2024.*

Harris & Associates

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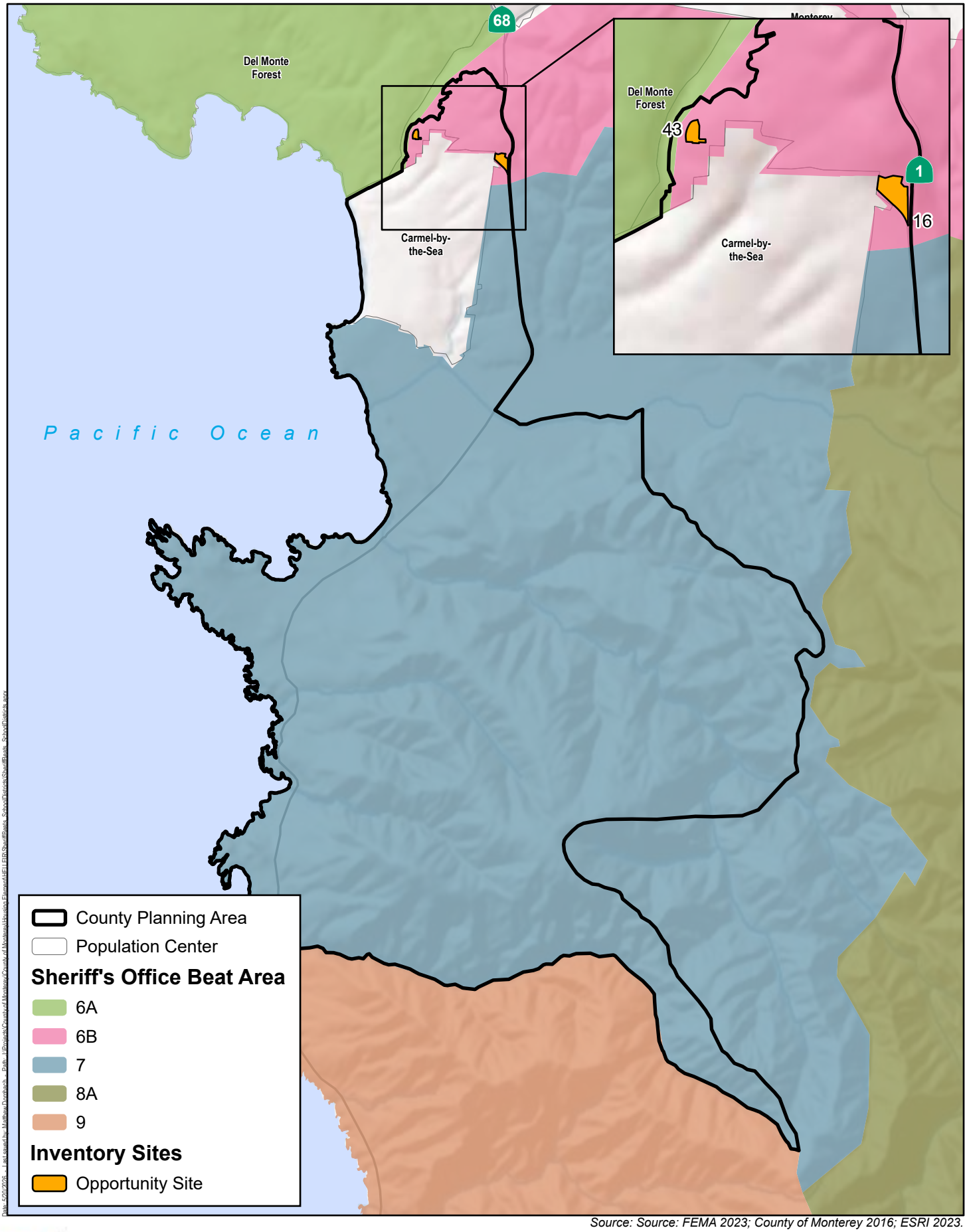
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**Figure 4.14-1**

Fire Protection Districts in Monterey County

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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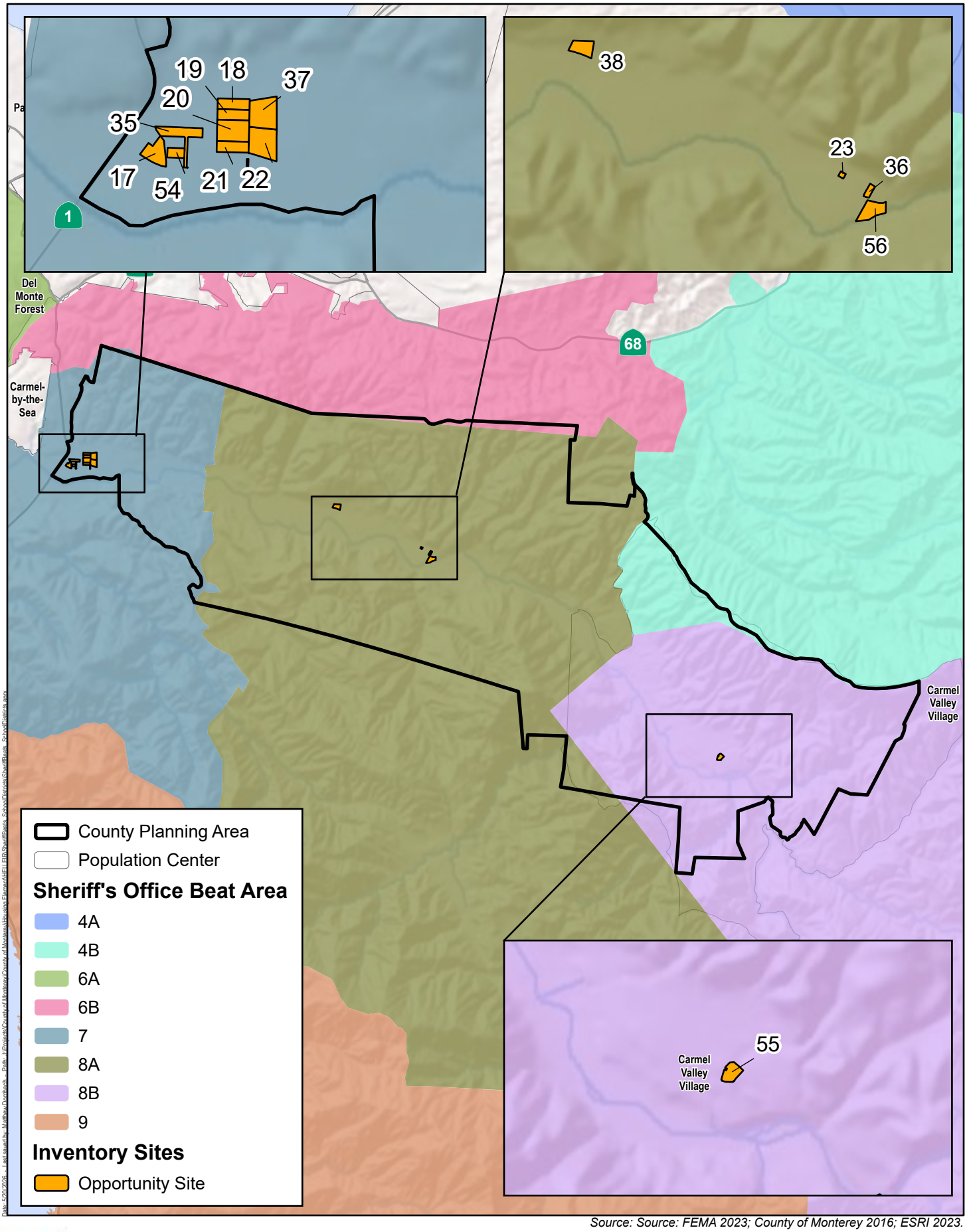
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**Figure 4.14-2a**

Sheriff Beat Areas - Carmel Area Land Use Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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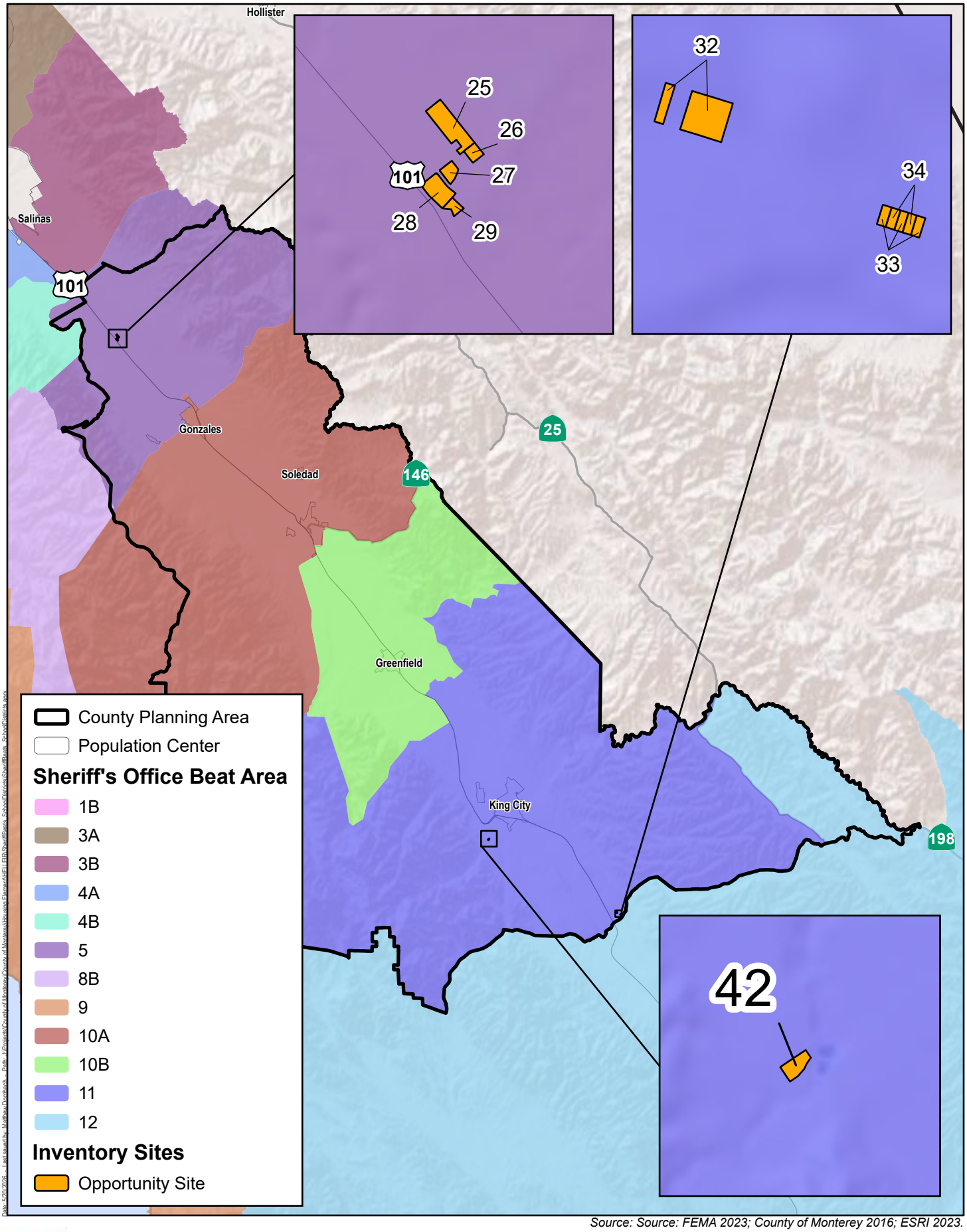
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**Figure 4.14-2b**

Sheriff Beat Areas - Carmel Valley Master Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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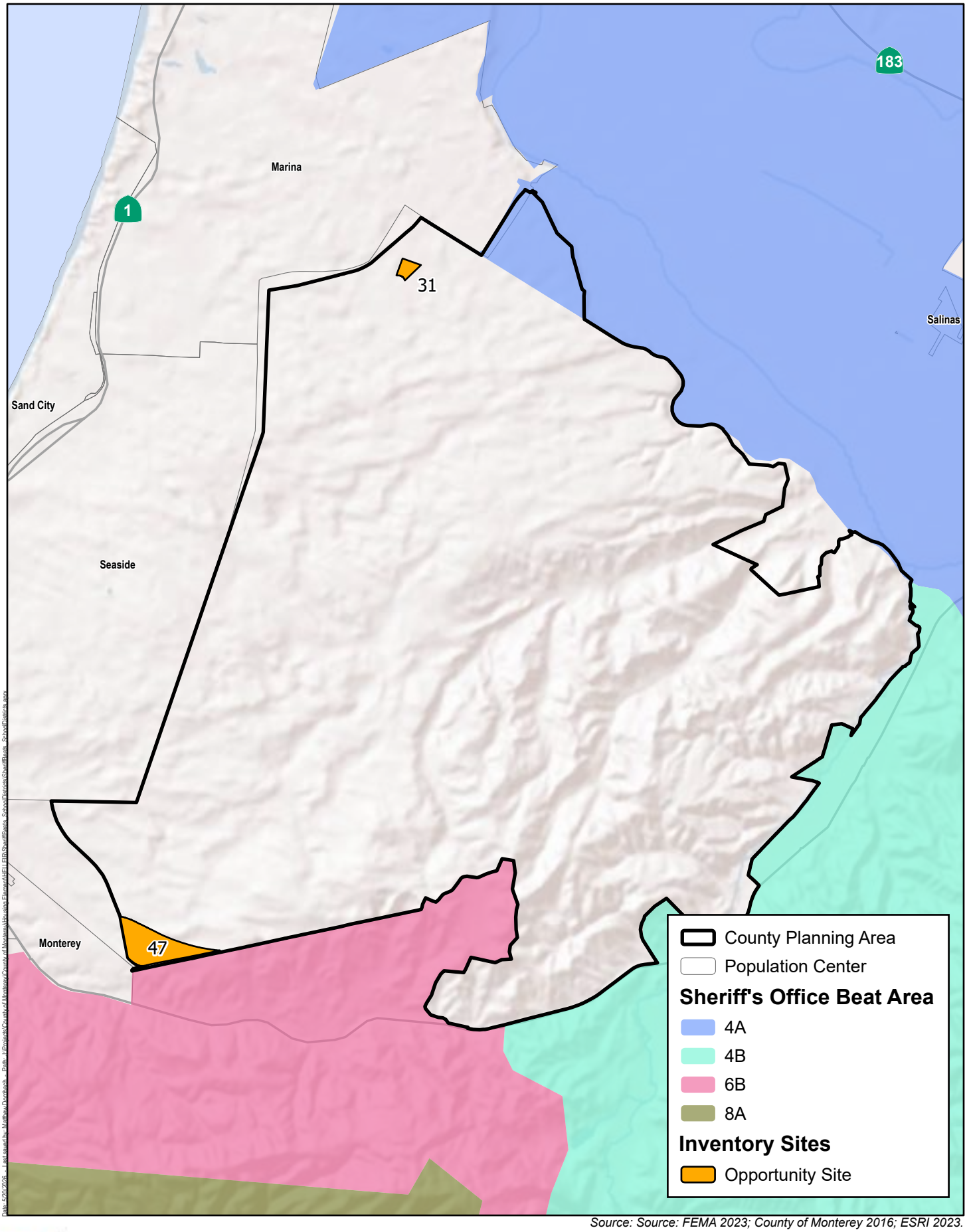
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**Figure 4.14-2c**

Sheriff Beat Areas - Central Salinas Valley Area Plan

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Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.

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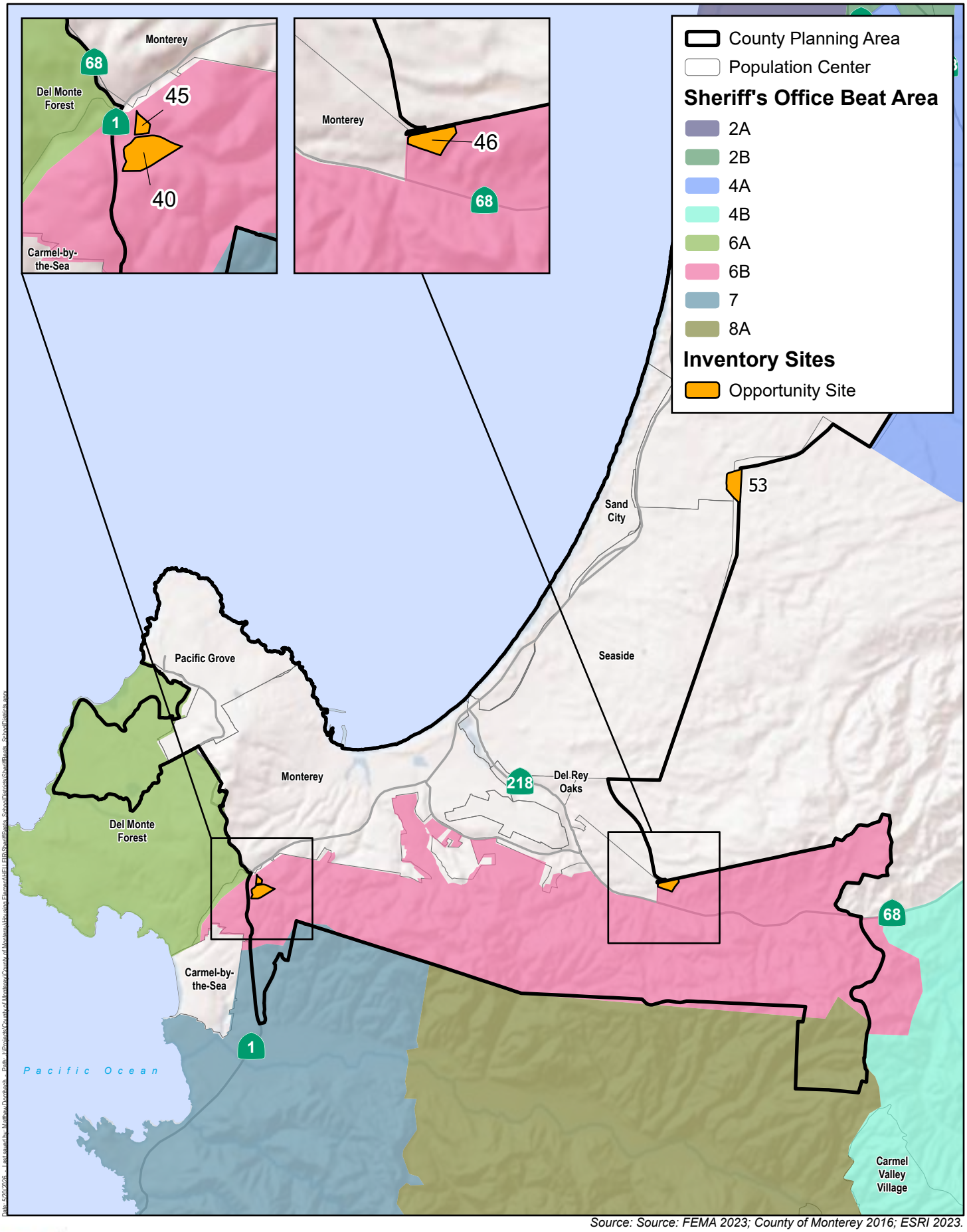
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**Figure 4.14-2d**

Sheriff Beat Areas - Fort Ord Master Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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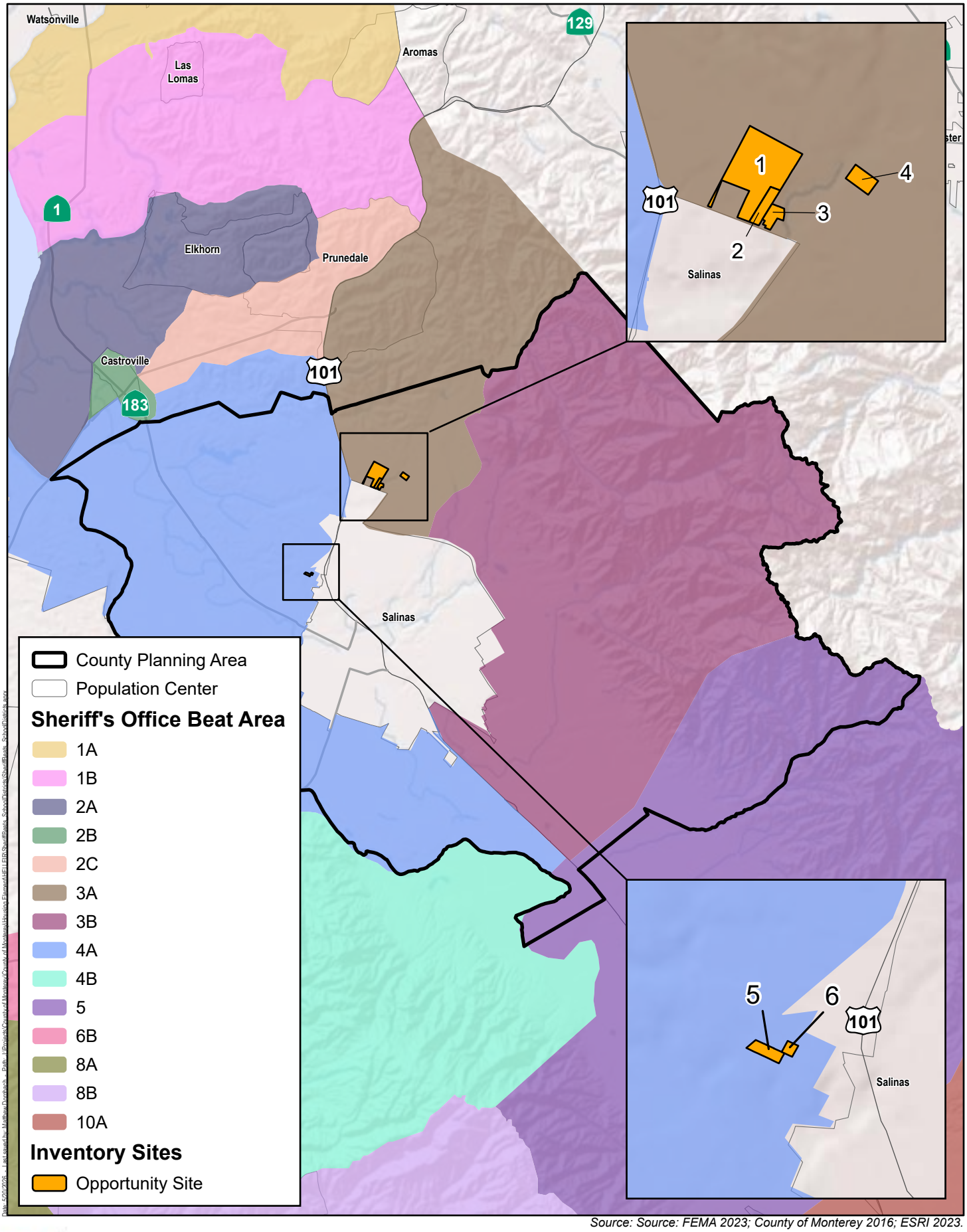
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**Figure 4.14-2e**

Sheriff Beat Areas - Greater Monterey Peninsula Area Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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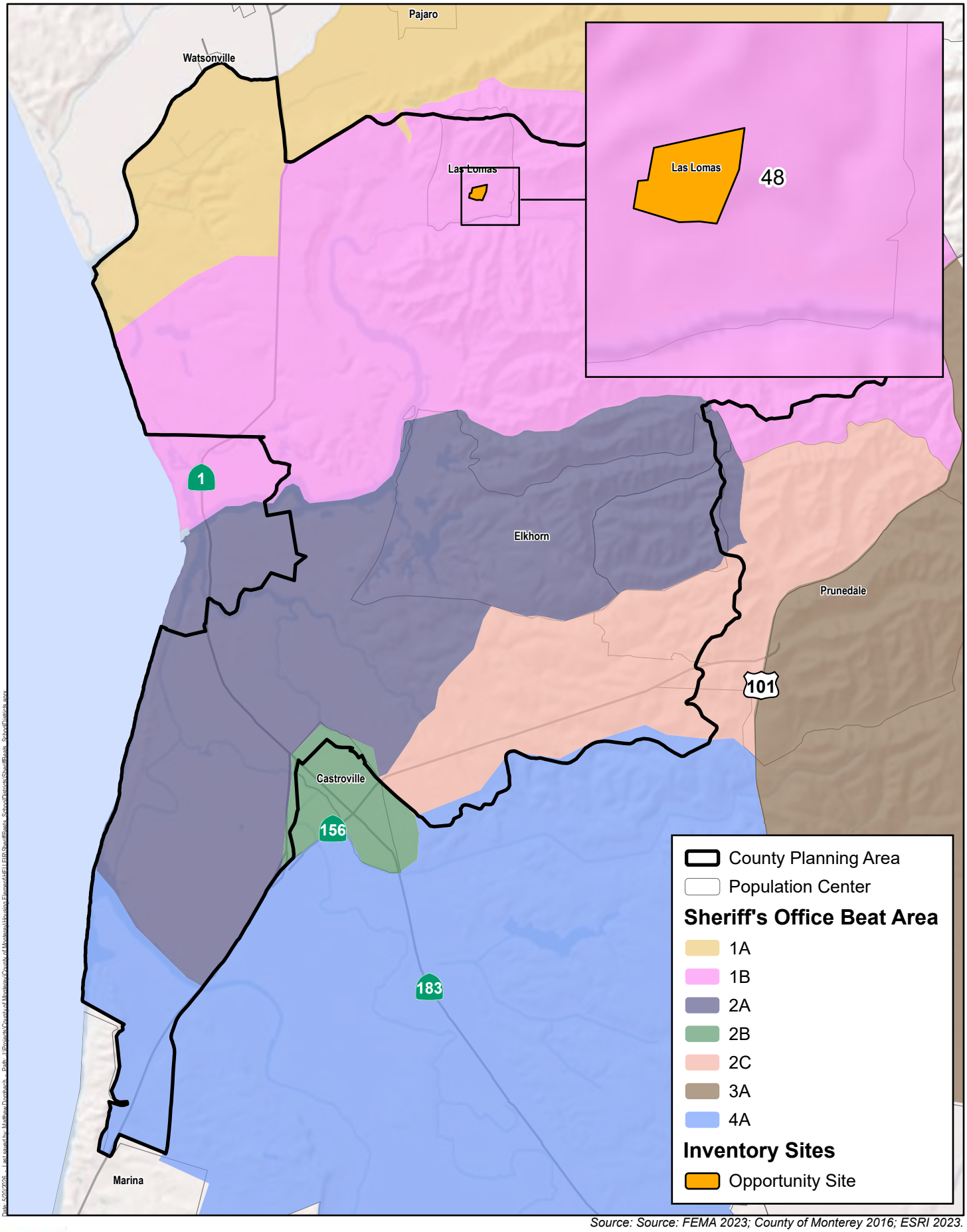
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**Figure 4.14-2f**

Sheriff Beat Areas - Greater Salinas Area Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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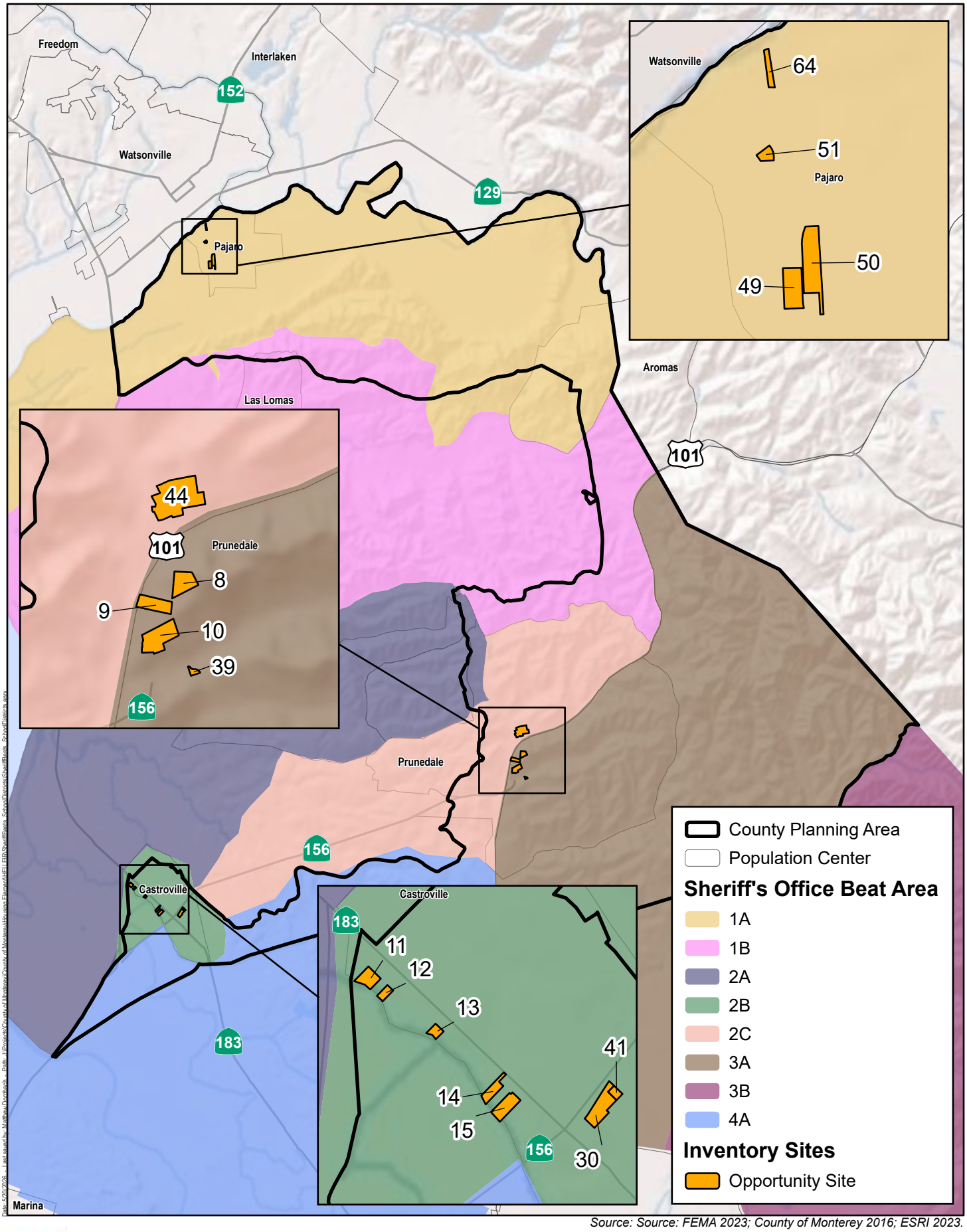
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**Figure 4.14-2g**

Sheriff Beat Areas - North County Land Use Plan (Coastal)

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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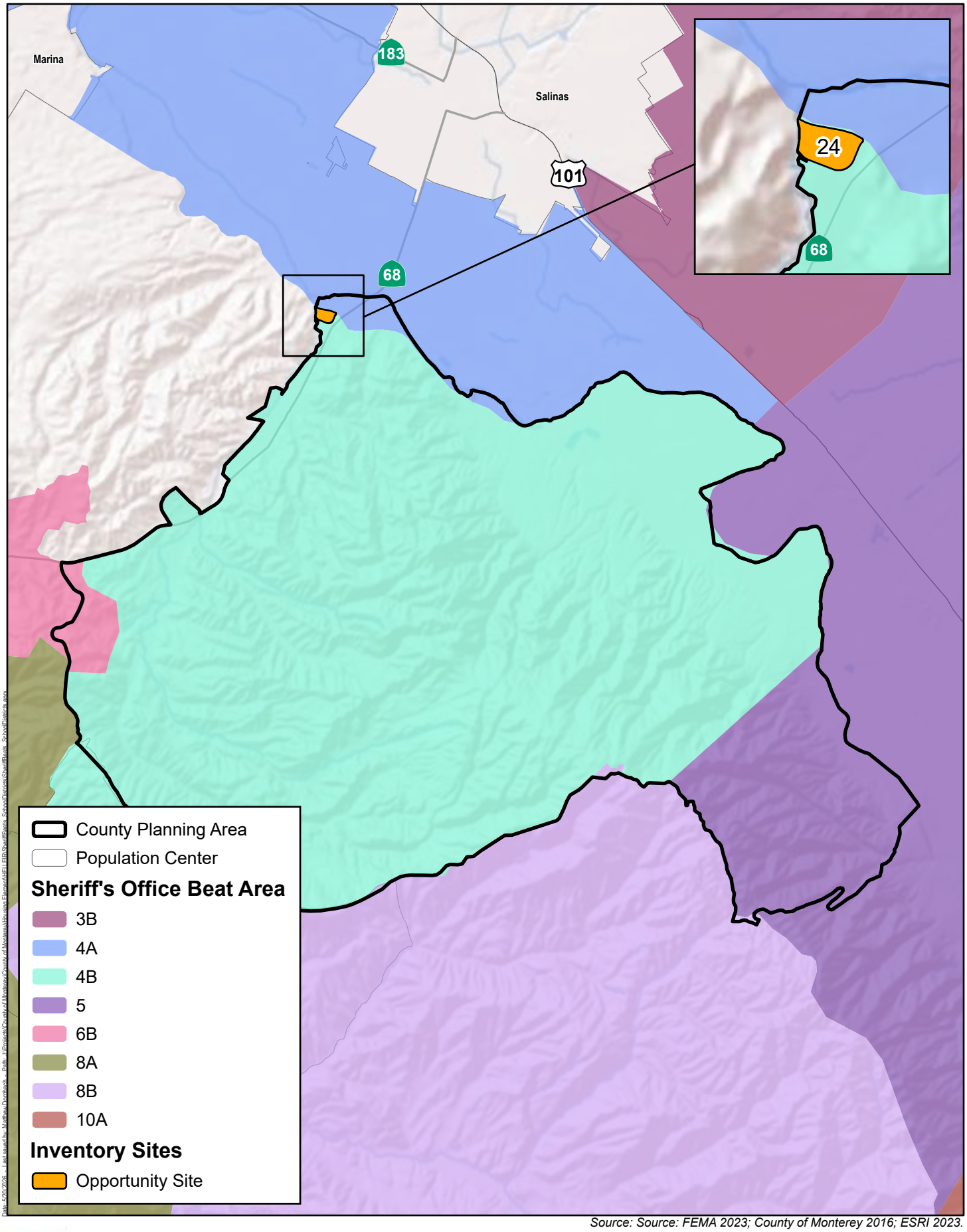
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**Figure 4.14-2h**

Sheriff Beat Areas - North County Area Plan (Inland)

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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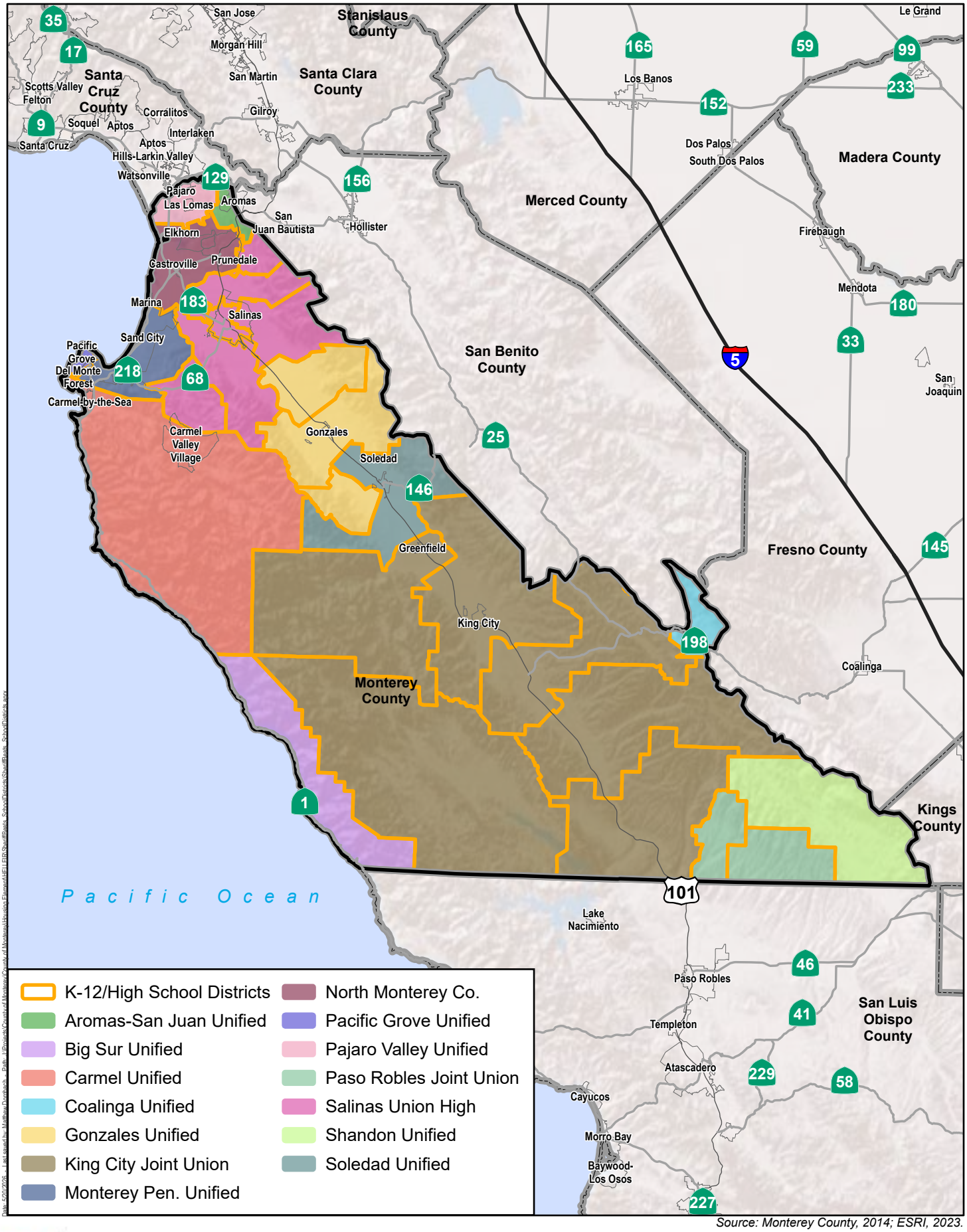
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**Figure 4.14-2i**

Sheriff Beat Areas - Toro Area Plan

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*Source: Monterey County, 2014; ESRI, 2023.*

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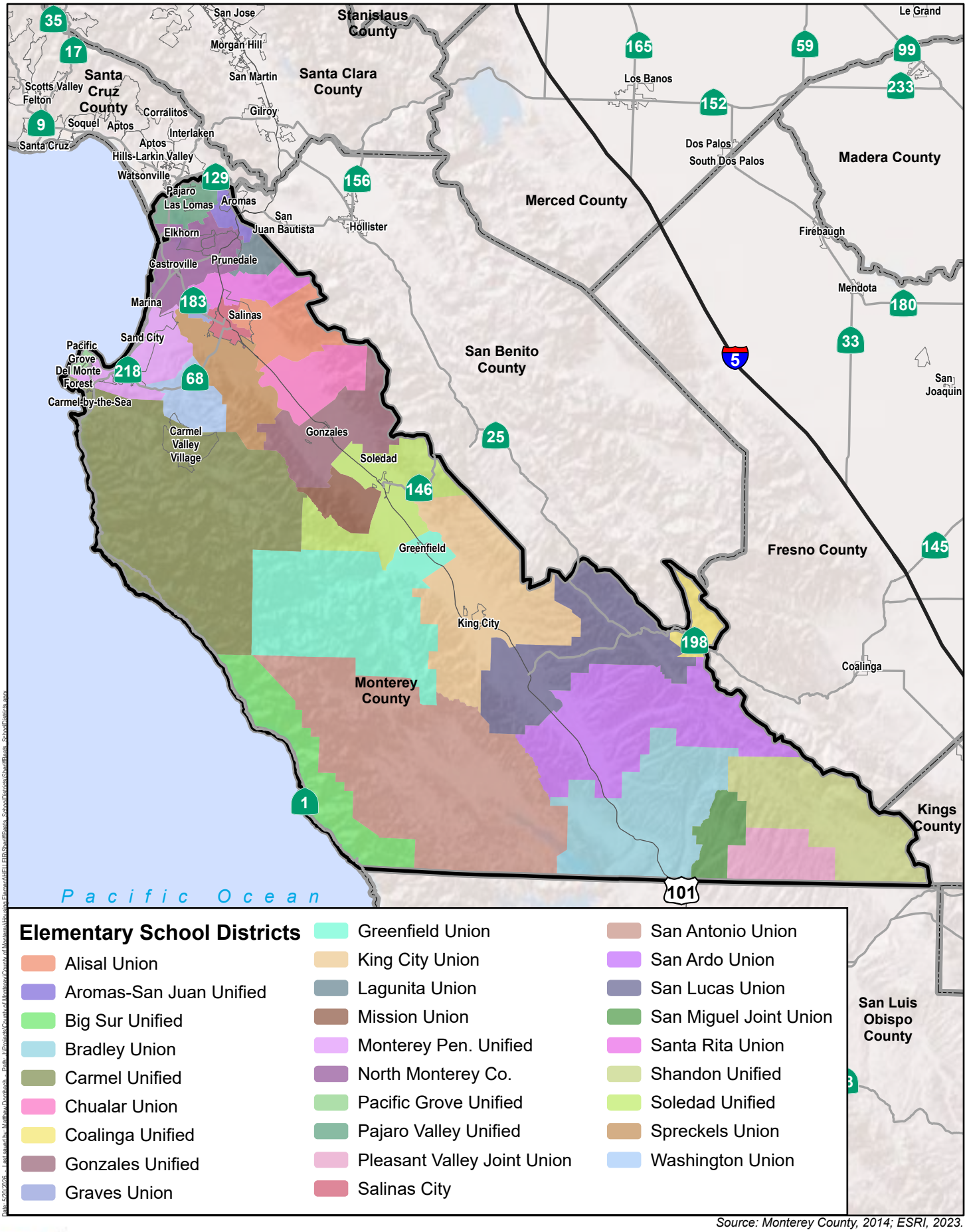
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**Figure 4.14-3**

Monterey County K-12/High School District Boundaries

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*Source: Monterey County, 2014; ESRI, 2023.*

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**Figure 4.14-4**

Monterey County Elementary School District Boundaries

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# 4.15 Recreation

This section evaluates the potential for impacts related to recreation resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts to the physical deterioration of existing parks and recreational facilities and the physical impacts of new or expanded recreational facilities. This analysis also addressed the potential impacts related to the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for parks.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.15.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address recreation.

### 4.15.1.1 Federal

There are no federal regulations applicable to recreational facilities.

### 4.15.1.2 State

#### Quimby Act

The Quimby Act (California Government Code, Section 66477) was established by the California Legislature in 1965 to provide parks for growing communities in California. The Act authorizes

cities to adopt ordinances addressing parkland and/or fees for residential subdivisions for the purpose of providing and preserving open space and recreational facilities and improvements. The Act requires the provision of three acres of park area per 1,000 people residing in a subdivision, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the county or city may adopt a higher standard not to exceed five acres per 1,000 residents. The Act also specifies acceptable uses and expenditures of such funds. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities.

#### 4.15.1.3 Local

### 2010 General Plan (Inland)

#### *Public Services Element*

The Public Services Element of the Monterey County General Plan (2010 General Plan) provides policies to address critical infrastructure and service issues, including parks. The Element includes requirements for adequate public facilities and services (Policies PS-1.1, PS-1.3, and PS-1.4). Policies PS-1.5 and PS-1.6 ensure adequate public services for new development by calling for an infrastructure phasing plan requiring installation of infrastructure improvements with each phase of new development and allowing only developments that have or can provide adequate public services and facilities. Additionally, Table PS-1 provides park standards for creation of new residential lots based on land type. Goal PS-11 and subsequent Policies PS-11.1 through PS-11.14 address the maintenance and enchantment of Monterey County's parks and trails system to provide recreational opportunities, preserve natural scenic resources and significant wildlife habitats, and provide good stewardship of open space resources.

### Area and Master Plans

#### *Fort Ord Master Plan*

The Fort Ord Master Plan contains Recreation/Open Space Land Use Policies and Program. Objectives A through D encourages land uses that respect, preserve, and enhance natural resources and open space; using open space to buffer and link land uses; reserve sufficient land for parks and recreation; and coordinate open space and recreation with other agencies that have jurisdiction in Fort Ord.

#### *Greater Salinas Area Plan*

The Greater Salinas Area Plan designates Butterfly Village as a "Special Treatment Area" that includes approximately 370.8 acres of neighborhood, County, and community parks and open space.

## Community Plans

### *Castroville Community Plan*

Goal 10 and Policies 10.6 support the provision of adequate levels of public services and infrastructure to meet the needs of new and existing development; specifically, development and redevelopment projects shall provide adequate parks and recreational facilities that meet the needs of the community.

## 1982 General Plan (Coastal)

The 1982 General Plan presents policies that address open space in the coastal areas of Monterey County (County of Monterey 1982). Policies 34.1.1 through 34.1.6 encourage development planning to includes on-site permanent open space in design of land uses. Goal 51 and subsequent policies 51.1.1 through 51.4.1 pertain to provision of adequate recreational opportunities, preservation of natural scenic resources and wildlife habitats by establishing a County regional parks and trails system.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan (Coastal)*

The North County Land Use Plan contains policies related to improving recreational opportunities and access to areas like Moss Landing State Beach, Salinas River State Beach, Moro Cojo Slough, Bennett Slough, Elkhorn Slough, and the Old Salinas River Channel area.

### *Carmel Area Land Use Plan*

The Carmel Area Land Use Plan recognizes recreation as a highly valued resource and prioritizes preservation and improvements to public recreational resources, opportunities, and coastal access.

## Monterey County Code

Title 19, Subdivisions, Section 19.12.010 (which applies to coastal and inland areas), would require new residential subdivisions to include dedication of land and/or payment of an in-lieu fee for providing additional parks, recreation facilities, and open space. The required parkland dedication is based on the dwelling type and number of dwelling units to maintain the County's general standard for 3 acres of local parks and recreation facilities for every 1,000 residents.

## 4.15.2 Environmental Setting

The following section describes the environmental setting for the project as it relates to recreation.

Approximately 14 percent of Monterey County's land area is devoted to parks and recreation facilities operated by various governmental agencies, including state parks, national parks, national forests, Bureau of Land Management, and local park agencies/districts. The County Department of Public Works, Facilities, and Parks is responsible for maintaining County parks, which comprise

about 10 percent of total park acreage in the UMC. These include Jacks Peak Park, Manzanita Park, San Lorenzo Park, Lake San Antonio, Lake Nacimiento, Fort Ord Travel Camp, Royal Oaks Park, and Toro County Park (County of Monterey 2024).

UMC recreational opportunities and parks are managed through a number of different entities, including County Public Works, Parks and Facilities (PWPF), recreation and community service districts, local jurisdictions, and federal agencies such as the Bureau of Land Management. Several opportunity sites are in districts that provide recreational opportunities and oversee parks management. Other sites are in proximity to parks managed by PWPF or under local/federal jurisdiction (such as the Elkhorn Slough Reserve and Fort Ord National Monument). The following information below notes the location of opportunity sites in a Parks District, near County parks, or near other recreational opportunities (LAFCO 2026 and PWPF 2026). Note that Sites 32 and 33 in San Lucas are not in proximity to formal recreational facilities/opportunities.

- In Recreation and Parks Districts/Community Services Districts:
  - North County Recreation and Parks District: Sites 11 through 15, 30, and 41
  - Monterey Peninsula Regional Park District: Sites 16 through 22, 35, 36, 38, 40, 43, 45, 47, 52, and56
  - Carmel Valley Recreation and Park District: Site 55
  - Greenfield Public Recreation District: None
  - Soledad Mission Recreation District: None
  - Pajaro/Sunny Mesa Community Services District: Sites 49, 50, 51, 64
- Proximity to County parks:
  - Toro Park, Jack's Peak, and Laguna Seca Recreation Area: Sites 40, 45, 46, 47, and 52
  - Manzanita Park: Sites 8, 9, 10, 44
  - San Lorenzo Park and Recreation Area: Site 42
  - Lake Nacimiento: None
  - Lake San Antonio: None
- Proximity to other Recreational Opportunities:
  - Fort Ord National Monument: Site 24
  - Elkhorn Slough Preserve: Site 48
  - City of Salinas Parks System: Sites 1 through 4

### 4.15.3 Method of Analysis

The analysis of environmental impacts related to recreation considers the potential increased use of existing recreational facilities and need for new or expanded recreation facilities due to an increase in demand for such facilities from project implementation. The analysis contained herein addresses potential impacts to recreation from a programmatic-level and countywide approach,

recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC would be facilitated by the project through identification and rezoning to encourage residential development. Where appropriate and possible, individual opportunity sites are discussed.

## 4.15.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on recreation if it would:

- **Threshold 1:** Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- **Threshold 2:** Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

In addition, Threshold 1 from Section 4.14, Public Services, is covered by Threshold 2 in this section.

- **Threshold 1 (from Section 4.14, Public Services):** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks.

## 4.15.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to public services that could result from implementation of the project.

### 4.15.5.1 Threshold 1: Deterioration of Existing Recreational Facilities

**Threshold 1:** Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

#### Impact Analysis

Implementation of the project would result in residential development that can meet future housing demands and includes rezoning that would allow for greater densities than are currently allowed under existing zoning. Development facilitated by the project would facilitate natural population growth over the HEU6 planning period as discussed in Section 7.2, Population and Housing, in Chapter 7, Effects Found Not to Be Significant. While the HEU6 includes a range of programs and policies to aggressively address existing development constraints to meet the County's Sixth Cycle Regional Housing Needs Assessment (RHNA) goals during the 2023–2031 Planning Period,

past development trends from the Fifth Cycle included 1,848 housing units constructed in the 2015–2023 Planning Period. While the County is committed to making adequate sites available to accommodate the County's RHNA obligations, these development trends indicate that buildout anticipated in the HEU6 may occur over a longer period of time. The increased population would result in increased use of existing parks and other recreation facilities in Monterey County. However, pursuant to the Quimby Act (California Government Code, Section 66477), Monterey County Code (County Code), Section 19.12.010 (which applies to coastal and inland areas), would require new residential subdivisions to include dedication of land and/or payment of an in-lieu fee for providing additional parks, recreation facilities, and open space. The required parkland dedication is based on the dwelling type and number of dwelling units to maintain the County's general standard for 3 acres of local parks and recreation facilities for every 1,000 residents (per County Code Section 19.12.010[C]). Community service districts and recreational service districts [1]would be responsible for paying park maintenance service charges based on the number of single- or multiple-family dwelling units and the total number of park maintenance units in the service areas. These County Code requirements would reduce impacts related to increased demand at existing recreation facilities, and applicants of new development on the opportunity sites that would be subdivided or in a service area would be required to dedicate land and/or pay the fees during the entitlement process.

As described in Section 4.14, several policies of the 2010 General Plan Public Services Element stipulate that no discretionary application for new development will be approved unless the County finds that adequate public facilities and services are provided and require a fair share of the cost to provide adequate services. As noted in Table PS-1, the thresholds for parks and recreation facilities to ensure access to neighborhood parks space.

Further, the 1982 General Plan, which still governs the County's coastal zones, provides several goals and policies that support the provision of parks and recreational facilities as well as the protection of natural and environmental resources as part of park planning and development. The 2010 General Plan Conservation and Open Space Element does not focus on parks and recreational facilities in the UMC; however, the County is in the process of updating its 2010 General Plan Conservation and Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network in both inland and coastal areas of UMC. Additionally, Goal PS-11 and Policies PS-11.1 through PS-11.14 of the 2010 General Plan Public Services Element provide a framework for parks and recreation facility needs, management practices and acquisition strategies. Therefore, the updated 2010 General Plan Conservation and Open Space Element as

[1] A County Service Area is a specialized, localized district created to fund and provide specific municipal-style services to unincorporated communities. Monterey County administers dozens of these areas, allowing residents to receive localized services, such as street lighting, park maintenance, or sewage disposal, through targeted property tax assessments.

well as the Public Services Element will guide future development and maintenance of parks and recreation facilities in UMC.

The County Board of Supervisors sets fees for admission to or use of County parks to cover the cost of park operation and maintenance. In addition, the North County Coastal Land Use Plan and Carmel Area Land Use Plan require that development of recreational facilities include submission and approval of a recreational management plan, which must include information such as the responsible agencies, facility maintenance and up-keep, facility supervision and management, expected number of facility users, development and management of the recreation area, proposed physical improvements, funding of proposed improvements, restoration of disturbed areas, and resource protection plans. Therefore, the County has mechanisms in place to plan and provide funding for the operation and maintenance of park facilities. While existing and future parks would need periodic maintenance, the increased demand for parks and other recreational facilities would not outpace routine maintenance.

In the vicinity of many opportunity sites, neighborhood parks are not currently accessible and may be a good distance away. To ensure access to adequate recreational amenities for future residents, the by-right ordinance will include requirements of on-site parkland open space or payment of an in-lieu fee should provision of on-site parkland be infeasible. Furthermore, residential developments that streamline under Objective Process would be required under the by-right housing ordinance to provide a fair share contribution to public services, including park facilities, as determined. Mitigation Measure (MM-) REC-OBJ-1 and MM-REC-CONS-2 require all developments streamlining under the Objective Process and Consistency Process to provide adequate parkland or an in-lieu fee based on the fair market value to meet the generated demand for parks and recreational facilities. Therefore, project implementation would not place demands on existing or future parks or recreational facilities such that substantial physical deterioration would occur, and impacts would be less than significant with mitigation.

## Significance of Impact

Potentially significant impact.

## Mitigation Measures

Provision of parkland or payment of a fair share in-lieu fee will be required for all projects streamlining under the HEU6 through MM-REC-OBJ-1 and MM-REC-CONS-2 below. The by-right housing ordinance requires implementation of MM-REC-OBJ-1 for future by-right development projects that will be streamlined under the Objective Process.

**MM-REC-OBJ-1: Provision of On-Site Parkland/Open Space or Payment of an In-Lieu Fee.** Applicants for by-right residential developments streamlining under the Objective Process shall be required to provide on-site parkland/open space for the benefit of

future residents. The amount of land to be provided shall be determined pursuant to the following formula:

- For Single Family Dwelling (SFD) – Calculation for amount of parkland based on 3.0 acres/1000 residents:

  .003 x 3.0 (SFD) x number of dwellings = acreage required on-site

- For Multi-Family Dwelling (MFD) – Calculation for amount of parkland needed based on 3.0 acres/1000 residents:

  .003 x 2.1 (MFD) x number of dwellings = acreage required on-site

Final siting of on-site parkland open space shall be approved by the Chief of Planning, or their designee, prior to issuance of a construction permit.

An applicant may request to pay an in-lieu fee instead of providing on-site parkland open space through written request for review and approval by the Chief of Planning, or their designee. The request shall be received at time of application submittal. The Chief of Planning shall authorize the payment of an in-lieu fee subject to demonstration by the applicant that all of the following criteria are met:

- Site constraints, such as topography, geology, access and location of the land is unsuitable for on-site parkland recreation;
- That the feasibility of an on-site parkland open space would render the project financially infeasible; and
- That the project site is within 2.5 miles travel distance from a project access point to an existing local or regional park that is served by public transit.

The amount of the fees shall be based upon the estimated fair market value of the land which otherwise be required on-site (and as calculated in the formulas listed above). The in-lieu fee shall be calculated with following formula: Acreage required on-site/total project acreage x fair market value = in-lieu fee.

The fair market value shall be determined by the County Assessor at the time of project approval. If the project applicant disagrees with the County Assessor's determination, they may request that the County Assessor obtain an appraisal of the property by a qualified appraiser mutually agreed upon by the County and applicant, with costs for this separate appraisal borne by the applicant. Payment of an in-lieu fee for on-site parkland open space shall be paid prior to issuance of a construction permit.

**MM-REC-CONS-2: Provision of On-Site Parkland/Open Space or Payment of an In-Lieu Fee.** Applicants for developments streamlining under the Consistency Process shall be

required to provide on-site parkland/open space for the benefit of future residents. The amount of land to be provided shall be determined pursuant to the following formula:

- For Single Family Dwelling (SFD) – Calculation for amount of parkland based on 3.0 acres/1000 residents:

  .003 x 3.0 (SFD) x number of dwellings = acreage required on-site

- For Multi-Family Dwelling (MFD) – Calculation for amount of parkland needed based on 3.0 acres/1000 residents:

  .003 x 2.1 (MFD) x number of dwellings = acreage required on-site

Final siting of on-site parkland open space shall be approved by the Chief of Planning, or their designee, prior to issuance of a construction permit.

An applicant may request to pay an in-lieu fee instead of providing on-site parkland open space through written request for review and approval by the Chief of Planning, or their designee. The request shall be received at time of application submittal. The Chief of Planning shall authorize the payment of an in-lieu subject to demonstration by the applicant that all of the following criteria are met:

- Site constraints, such as topography, geology, access and location of the land is unsuitable for on-site parkland recreation;
- That the feasibility of an on-site parkland open space would render the project financially infeasible; and
- That the project site is within 2.5 miles travel distance from a project access point to an existing local or regional park that is served by public transit.

The amount of the fees shall be based upon the estimated fair market value of the land which otherwise be required on-site (and as calculated in the formulas listed above). The in-lieu fee shall be calculated with following formula: Acreage required on-site/total project acreage x fair market value = in-lieu fee.

The fair market value shall be determined by the County Assessor at the time of project approval. If the project applicant disagrees with the County Assessor's determination, they may request that the Count Assessor obtain an appraisal of the property by a qualified appraiser mutually agreed upon by the County and applicant, with costs for this separate appraisal borne by the applicant. Payment of an in-lieu fee for on-site parkland open space shall be paid prior to issuance of a construction permit.

## Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.15.5.2 Threshold 2: New or Expanded Recreational Facilities

**Threshold 2:** Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for parks?

### Impact Analysis

Implementation of the HEU6 accounts for and would result in planned population growth associated with the development of housing to meet the state-mandated RHNA. As such, implementation of the HEU6 would increase population growth that could result in an increase in the use of or demand for parks that may result in the need for new or altered parks and recreation facilities to maintain acceptable service ratios. While the HEU6 includes a range of programs and policies to aggressively address existing development constraints to meet the County's Sixth Cycle RHNA goals during the 2023–2031 Planning Period, past development trends from the Fifth Cycle included 1,848 housing units constructed in the 2015–2023 Planning Period. While the County is committed to making adequate sites available to accommodate the County's RHNA obligations, these development trends indicate that buildout anticipated in the HEU6 may occur over a longer period of time. As noted in Table PS-1, the thresholds for parks and recreation facilities ensure access to neighborhood parks space. However, the potential for the construction of future parks and recreation facilities to result in substantial adverse physical impacts on the environment is low. For instance, construction of future parks and recreation facilities would likely require subsequent environmental review under CEQA, which would evaluate the potential of the development to result in significant environmental impacts and would mitigate potentially adverse, significant impacts, as necessary and feasible. There are numerous state and local laws and regulations in place that protect the environment from physical adverse impacts of development, as described in Section 4.15.1, Regulatory Setting. For example, Title 16 of the County Code governs construction and operations in UMC for the protection of the environment, including but not limited to Chapter 16.08, which provides regulations for all grading activities; Chapter 16.12, which provides regulations for erosion control; Chapter 16.14, which regulates stormwater quality management and discharge control; and Chapter 16.16, which enforces ordinances and regulations for flood control. Goal PS-11 and Policies PS-11.1 through PS-11.14 of the 2010 General Plan Public Services Element provide a framework for parks and recreation facility needs, management practices and acquisition strategies. Policies PS-11.11 and PS-11.12 of the 2010 General Plan Public Services Element requires the County to prepare and adopt management plans for all County park and recreational facilities, emphasizing protection of environmental resources, appropriate management of uses, and best management practices for open space. In addition, the North County Coastal Land Use Plan and Carmel Area Land Use Plan require that development of

recreational facilities include submission and approval of a recreational management plan, which must include information such as the responsible agencies, facility maintenance and up-keep, facility supervision and management, expected number of facility users, development and management of the recreation area, proposed physical improvements, funding of proposed improvements, restoration of disturbed areas, and resource protection plans. The recreational management plan would evaluate the potential for impacts to the physical environment and would plan for restoration and resource protection. Therefore, the project is not anticipated to result in a substantial adverse physical impacts associated with the provision of new or physically altered parks and recreation facilities to maintain acceptable service ratios.

Construction and operation of new recreational facilities may result in physical effects on the environment, including impacts relating to biological resources, cultural resources, geology and soils, and hydrology and water quality. However, existing federal, state, and local regulations, would mitigate potential adverse impacts to the environment that may result from the construction or expansion of parks, recreational facilities, and trails. For instance, Title 16 of the County Code governs construction and operations in UMC for the protection of the environment, including but not limited to Chapter 16.08, which provides regulations for all grading activities; Chapter 16.12, which provides regulations for erosion control; Chapter 16.14, which regulates stormwater quality management and discharge control; and Chapter 16.16, which enforces ordinances and regulations for flood control. Policies PS-11.11 and PS-11.12 of the 2010 General Plan Public Services Element requires the County to prepare and adopt management plans for all County park and recreational facilities, emphasizing protection of environmental resources, appropriate management of uses, and best management practices for open space. By requiring management plans for all County parks and recreational facilities emphasizing protection of environmental resources and distinguishing parks for more active uses from passive use of open space areas rich in biological resources, Policies PS-11.11 and PS-11.12 would serve to reduce the potential for new or expanded facilities to result in adverse physical impacts on the environment. In addition, the North County Coastal Land Use Plan and Carmel Area Land Use Plan requires that development of recreational facilities include submission and approval of a recreational management plan, which must include information such as the responsible agencies, facility maintenance and up-keep, facility supervision and management, expected number of facility users, development and management of the recreation area, proposed physical improvements, funding of proposed improvements, restoration of disturbed areas, and resource protection plans. The recreational management plan would evaluate the potential for impacts to the physical environment and would plan for restoration and resource protection. Finally, construction of future parks and recreation facilities would likely require subsequent environmental review under CEQA, which would evaluate the potential of the development to result in significant environmental impacts and would mitigate potentially adverse, significant impacts, as necessary. The potential for adverse impacts on the environment would be

evaluated in the County's park management plans and under CEQA, with measures to avoid, compensate, and reduce impacts on the environment.

To ensure access to adequate recreational amenities for future residents, the by-right ordinance will include requirements of on-site parkland open space or payment of an in-lieu fee should provision of on-site parkland be infeasible. Furthermore, residential developments that streamline under the Objective Process would be required under the by-right housing ordinance to provide a fair share contribution to public services, including park facilities, as determined. MM-REC-OBJ-1 and MM-REC-CONS-2 require all developments streamlining under the Objective Process and Consistency Process to provide adequate parkland or an in-lieu fee based on the fair market value to meet the generated demand for parks and recreational facilities.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-REC-OBJ-1 and MM-REC-CONS-2 above.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.15.6 Cumulative Impacts

The following section addresses various potential cumulative impacts relating to recreation that could result from implementation of the project. Refer to Chapter 4, Environmental Analysis, for further discussion of the methodology used for the cumulative analysis.

### 4.15.6.1 Cumulative Thresholds 1 and 2: Deterioration of Existing Recreational Facilities and New or Expanded Recreational Facilities

Cumulative impacts to parks and recreational facilities could occur if the project, in combination with other cumulative projects, resulted in the accelerated deterioration of existing facilities or required the provision of new or expanded parks or recreational facilities, the construction of which resulted in significant impacts to the environment. As described in Section 4.15.5.1, with implementation of MM-REC-OBJ-1 and MM-REC-CONS-2, all residential projects streamlining under the HEU6 would require provision of on-site parkland for the benefit of future residents, or payment of a fair share in-lieu fee if specific criteria are met. Just as future development facilitated by the project would be required to comply with the state and County requirements for parks provision, it is reasonable to assume that cumulative projects would be subject to the same or similar standards. The deterioration that would occur to local and regional recreation parks from regional population growth may be offset by the acquisition of parkland and collection of in-lieu fees pursuant

to the Quimby Act, as well as by the County's and incorporated city's continued implementation of park improvement and development projects. To accommodate future demand for park and recreational facilities from population growth in the region, additional park and recreational facilities will have to be developed and constructed throughout the region. Other cumulative projects would increase the need for recreational facilities in the region. Cumulative development would still incrementally increase the need for new or expanded facilities, which may have the potential to result in adverse environmental effects. Cumulative construction of future parks and recreation facilities would likely require subsequent environmental review under CEQA, which would evaluate the potential of the development to result in significant environmental impacts and would mitigate potentially adverse, significant impacts, as necessary. With implementation of the project mitigation measures and compliance with state and County requirements, the project would not contribute to impacts related to recreation. Therefore, cumulative impacts to the provision of parks and recreational facilities would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measure

No mitigation measure is required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.15.7 Conclusion

Implementation of MM-REC-OBJ-1 and MM-REC-CONS-2 would reduce potential impacts pertaining to parks and recreation to a less than significant level.

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# 4.16 Transportation

This section evaluates the potential for impacts related to transportation resulting from the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project).

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description. The HEU6 includes a total of 56 opportunity sites: Opportunity Sites 1 through 6, 8 through 56, and 64, totaling 4,434 housing units as a reasonable development capacity to meet the assigned Regional Housing Needs Allocation (RHNA) target.

This section also evaluates the theoretical maximum buildout scenario of 12,497 units to fully disclose the potential environmental consequences associated with the highest intensity of development legally permitted under the proposed zoning for impacts. This analysis is based on the vehicle miles traveled (VMT) Technical Memorandum VMT Memo) prepared by Kimley-Horn (2026) included as Appendix L to this PEIR, and this technical memorandum evaluated this theoretical maximum buildout scenario of 12,497 units. This theoretical maximum was analyzed because the HEU6 proposes rezoning to either the HDR/25 (High Density Residential at a maximum of 25 dwelling units per acre) for approximately 114.88 acres or HDR/30 (High Density Residential at a maximum of 30 dwelling units per acre) for approximately 329.37 acres. While these maximum densities are not supported by historical building trends nor align with market demand in the UMC, they are legally permitted under the HEU6's proposed rezoning and, therefore, used for modeling VMT. And based on this theoretical maximum, technical analyses that rely on VMT data were also conducted for consistency and conservative modeling purposes where appropriate. Those technical analyses other than transportation include air quality (Section 4.3), energy (Section 4.6), greenhouse gas emissions (Section 4.8), and noise

(Section 4.13). These are the only issue areas required for review under California Environmental Quality Act (CEQA) in this PEIR that evaluate this theoretical maximum buildout scenario.

Note that while this section of the PEIR evaluates the theoretical maximum of housing units of 12,497, it also presents more reasonable buildout scenarios for comparison purposes, as described in Section 4.3.3, Method of Analysis.

## 4.16.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address transportation.

### 4.16.1.1 Federal

#### Code of Federal Regulations, Title 23, Section 450.220

Revised on April 1, 2005, Title 23, Section 450.220, of the Code of Federal Regulations requires each state to carry out a continual, comprehensive, and intermodal statewide transportation planning process. This planning process must include the development of a Statewide Transportation Plan and Transportation Improvement Program that facilitates the efficient, economic movement of people and goods in all areas of the state.

#### Highway Capacity Manual

The Highway Capacity Manual, prepared by the federal Transportation Research Board, is the result of a collaborative, multiagency effort between the Transportation Research Board, Federal Highway Administration, and American Association of State Highway and Transportation Officials. The Highway Capacity Manual contains concepts, guidelines, and computational procedures for the capacity and quality of service of various highway facilities, including freeways, signalized and unsignalized intersections, rural highways, and the effects of transit, pedestrians, and bicycles on the performance of these systems. It is a tool for valuating transportation operations, such as congestion, delay, level of service (LOS), queue lengths, and intersection or roadway performance.

### 4.16.1.2 State

#### Assembly Bill 1358: Complete Streets Act

The California Complete Streets Act of 2008 (Assembly Bill (AB) 1358) ensures that transportation plans of California communities meet the needs of all users of the roadway, including pedestrians, bicyclists, users of public transit, motorists, children, older adults, and people with disabilities. AB 1358 requires the legislative body of a city or county, upon revision of the Circulation Element of their General Plan, to identify how the jurisdiction will provide for

the routine accommodation of all users of the roadway, including motorists, pedestrians, bicyclists, individuals with disabilities, older adults, and users of public transportation. The bill also directs the Governor's Office of Planning and Research (OPR), now referred to as the Office of Land Use and Climate Innovation (LCI), to amend guidelines for the development of General Plan Circulation Elements so that the construction and operation of local transportation facilities safely and conveniently accommodates everyone, regardless of their mode of travel.

### Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743, which created a process to change the way transportation impacts are analyzed under the CEQA. SB 743 requires the OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Aside from changes to transportation analyses, SB 743 also includes several important changes to CEQA that apply to transit-oriented developments, including aesthetics and parking.

On December 2018, the California Natural Resources Agency certified and adopted the update to the CEQA Guidelines, implementing SB 743 (Cal. Code Regs. Title 14, Section 15064.3). Under the OPR's revisions to the CEQA Guidelines, VMT exceeding an applicable threshold of significance may indicate a significant transportation impact. Under the VMT standard, projects within 0.25 mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should generally be presumed to cause a less than significant transportation impact. Furthermore, under the CEQA Guidelines revisions, for projects other than roadway capacity projects, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, should not be considered a significant effect on the environment. The revisions to the CEQA Guidelines allow a lead agency to elect to evaluate transportation impacts under the revised CEQA Guidelines at any time and made the revised CEQA Guidelines applicable statewide beginning July 1, 2020.

### Assembly Bill 130 (Statewide Vehicle Miles Traveled Mitigation Program)

In June 2025, Governor Gavin Newsom signed into law AB 130, which established an entirely new statewide framework for mitigating transportation impacts under CEQA. Administered jointly by the LCI and the California Department of Housing and Community Development (CA HCD), AB 130 created a standardized, state-administered Statewide Vehicle Miles Traveled (VMT) Mitigation Program (the "Statewide VMT Bank"). AB 130 added California Public Resources Code (PRC), Section 21080.43, which identifies the need for the program and establishes that it will use the VMT efficiencies associated with affordable housing and related infrastructure as mitigation.

On June 30, 2026, LCI released the final Statewide Vehicle Miles Traveled (VMT) Mitigation Program Guidance, to support the implementation of the VMT mitigation program established under AB 130. Under this Mitigation Program, lead agencies that determine a project will have a significant

transportation impact under CEQA (Impacting Project) may mitigate that impact to a less than significant level, or to the extent feasible, by contributing to the Transit-Oriented Development Implementation Fund (TDIF). CA HCD then uses contributions collected via the TDIF to award funding for VMT-efficient affordable housing and related infrastructure projects (Mitigating Projects) through the TDIF, therefore, advancing California's climate, equity, and housing goals.

## California Department of Transportation Standards

The California Department of Transportation (Caltrans) is responsible for planning, designing, building, operating, and maintaining California's transportation system. Caltrans sets standards, policies, and Strategic Plans that aim to: (1) provide the safest transportation system for users and workers; (2) maximize transportation system performance and accessibility; (3) efficiently deliver quality transportation projects and services; (4) preserve and enhance California's resources and assets; and (5) promote quality service. Caltrans has the discretionary authority to issue special permits for the use of state highways for other than normal transportation purposes. Caltrans also reviews all requests from utility companies, developers, volunteers, non-profit organizations, and others desiring to conduct various activities within the state highway right-of-way. The Caltrans Highway Design Manual, prepared by the Office of Geometric Design Standards (7th edition, updated 2020), establishes uniform policies and procedures to carry out the highway design functions of Caltrans (Caltrans 2020). Caltrans also prepared a Guide for the Preparation of Traffic Impact Studies (Caltrans 2002) to provide consistency and uniformity in the identification of traffic impacts generated by local land use proposals.

### *2021 Active Transportation Plan for California Department of Transportation District 5*

The District 5 Active Transportation Plan advances the Vision Statement and Goals in Toward an Active California, the statewide bicycle and pedestrian plan, and is part of a comprehensive planning process to identify locations with walking and bicycling needs in each Caltrans district across California. The plan includes a prioritized list of bicycle and pedestrian needs along and across the state highway system to help identify opportunities to incorporate bicycle, pedestrian, and transit improvements into projects.

Additionally, Caltrans has introduced additional guidance and policies to enhance active transportation planning statewide. Notably, the Active Transportation Emphasis Area Guidance for Corridor Planning (2025) emphasizes the integration of the Safe System Approach into corridor planning processes, aiming to eliminate fatalities and serious injuries on California roadways by 2050 (Caltrans 2025).

Furthermore, in December 2021, Caltrans implemented a policy mandating that all new transportation projects include safe and accessible options for pedestrians, bicyclists, and transit users. This policy reinforces the objectives of the Active Transportation Plans and underscores Caltrans' commitment to enhancing safety and accessibility for all modes of transportation.

### *Scenic Route 68 Corridor Improvements Project*

Caltrans is proposing to improve traffic operations and reduce collisions with wildlife on an approximately 9-mile stretch of State Route 68 in Monterey County by modify the design of nine intersections from Josselyn Canyon Road to San Benancio Road and providing five new underground culverts for wildlife to use to cross under the highway. The purpose of the project is to improve intersection operations to reduce vehicle delays throughout the project corridor and reduce the rate and severity of collisions in the project area. The project also proposes to enhance wildlife connectivity, reduce the rate of collisions between vehicles and wildlife, and improve bicycle and pedestrian access within the project section of State Route 68 (Caltrans 2026).

### *South of Salinas Access Management Plan*

Caltrans is developing a safety improvement project is in Monterey County on U.S. Route 101 (also known as Highway 101) between Chualar and Salinas. The project proposes to remove all 11 at-grade media openings between Airport Road and Chualar and eliminate all left-turn movements onto and off the U.S. Route 101 and all U turns. The purpose of the project is to reduce the frequency and severity of collisions involving crossing and left-turn movements (Caltrans 2026).

### *South of Salinas Corridor Improvement Project*

Caltrans is also managing the U.S. Route 101 South of Salinas project. The project aims to enhance efficiency/traffic flow and safety along an 8 mile stretch of U.S. Route 101 between Salinas and Chualar. To maintain continued access to existing and adjacent land uses, the project would relocate the Abbott and Chualar interchanges and construct frontage roads on both the east and west sides of the highway between the reconstructed interchanges. The proposed project elements include: relocation and reconstruction of the existing Chualar interchange; relocation and reconstruction of the existing Abbott Street ramps to a diverging diamond interchange; development of a new frontage road on both the east and west sides of the highway mainline; conversion of U.S. Route 101 to a freeway through the closure of all local road intersections; and closure of six rail crossings on the west side of U.S. Route 101. The goal of the project is to minimize safety challenges and increase freight efficiency and travel reliability (Caltrans 2026).

### *Big Sur Coast Highway Management Plan*

In March 2004, Caltrans adopted the Big Sur Coast Highway Management Plan (CHMP). The purpose of the CHMP is to provide a shared vision for the corridor and to evaluate problems and craft solutions. The plan covers the SR-1 corridor from the Carmel River in Monterey County to the San Carpoforo Creek in San Luis Obispo County. The purpose of the CHMP is to establish coordinated management of the SR-1 corridor to preserve, protect and restore the area's unique qualities while ensuring the continued safe and efficient operation of the highway. An update to the 2004 CHMP is underway with Caltrans.

### 4.16.1.3 Regional

## Association of Monterey Bay Area Governments

### *Metropolitan Transportation Plan/Sustainable Communities Strategy*

As required by SB 375, Association of Monterey Bay Area Governments (AMBAG) develops a Sustainable Communities Strategy (SCS) every 4 years as part of updating its Metropolitan Transportation Plan (MTP). The AMBAG MTP/SCS outlines a regional approach to reducing VMT. This approach emphasizes the integration of land use planning with transportation enhancements and incorporates the following goals and policies:

- **Access and Mobility –** Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region.
- **Economic Vitality –** Raise the region's standard of living by enhancing the performance of the transportation system.
- **Environment –** Promote environmental sustainability and protect the natural environment.
- **Healthy Communities –** Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation.
- **Social Equity –** Provide an equitable level of transportation services to all segments of the population.
- **System Preservation and Safety –** Preserve and ensure a sustainable and safe regional transportation system.

This framework of goals and policy objectives was used to guide the development of the 2045 MTP/SCS.

## Transportation Agency of Monterey County

### *2022 Monterey County Regional Transportation Plan*

The Monterey County Regional Transportation Plan (RTP) is a long-range planning document that outlines transportation projects and funding strategies through 2045. The RTP is developed by the Transportation Agency of Monterey County (TAMC). It addresses various modes, including highways, transit, rail, and active transportation, aiming to improve mobility, safety, and environmental sustainability. The plan includes a financial forecast and a list of prioritized projects to guide future investments. The RTP includes a broad set of goals and policy objectives focused on access and mobility, safety and health, environmental stewardship, equity, and economic vitality. Specifically, Policy Objective 1.4 is aimed at reducing transportation congestion through increasing accessibility of viable transportation alternatives for regional travel and commute patterns. Policy Objectives 2.4 and 3.1 are intended to reduce criteria air pollutant and greenhouse gas emissions. Policy Objective 5.2 is for the enhancement and maintenance of the existing transportation system.

#### *Monterey County Active Transportation Plan*

The Monterey County Active Transportation Plan (ATP) focuses on analyzing key gaps from the existing and proposed bicycle and pedestrian networks, identifying opportunity sites for innovative bicycle facility design, and identified areas for enhanced regional and local connectivity. Community input was a key component of the ATP and guided the development of priority projects and infrastructure improvements. The ATP focuses on identifying high-priority bicycle and pedestrian projects (TAMC 2018). Chapter 5.1 outlines priority projects for UMC. TAMC is in the process of updating the 2018 ATP. The 2018 ATP is also addressed in Section 4.16.1.4.

#### *Safe Routes to School*

The Safe Routes to School program is managed by TAMC in partnership with local agencies and funded through local transportation sales tax Measure X. The purpose of the Safe Routes to School program is to: develop better and safer options than driving the majority of children to school; educating children and the surrounding community how to safely walk and bike; and encouraging children to use active transportation that will lead a healthier lifestyle. TAMC is currently developing a Safe Routes to School Plan for northern Monterey County (Aromas, Castroville, Elkhorn, Las Lomas, Moss Landing, Oak Hills, Pajaro and Royal Oaks) that includes recommendations on infrastructure improvements to make walking and biking to school safer (TAMC 2026a).

#### *Monterey County Regional Vision Zero*

The Monterey County Regional Vision Zero Safety Action Plan aims to make it safer to travel on city streets and county roads. Through using the safe systems approach, the Vision Zero Plan provides recommendations on safety improvements with the goal of reducing fatal and serious traffic injuries by 30 percent by 2030 with the ultimate goal of eliminating fatal and serious injuries by 2040 (TAMC 2026b).

### Monterey-Salinas Transit

#### *Monterey-Salinas Transit Planning Initiatives*

Monterey-Salinas Transit (MST) conducts ongoing planning studies to evaluate and improve transit services within Monterey County. These initiatives assess current routes, schedules, and demand to enhance public transportation options and connectivity across the region. These planning initiatives include: Salinas Rapid Bus and Transit Center Relocation Study (2025), Final Project Report Monterey Bay Area Feasibility Study of Bus on Shoulder Operation on State Route 1 and the Monterey Branch Line, and a Transit-oriented Development Planning Study.

### 4.16.1.4 Local

## 2010 General Plan (Inland)

The County of Monterey General Plan is a guide for future development and land use in Monterey County, California. It sets rules and goals to help make sure that growth is safe, protects the environment, and meets the needs of the community.

#### *Circulation Element*

The Circulation Element of the General Plan identifies the general location and extent of existing and proposed major transportation facilities for vehicle, rail, air, water, and bicycle transportation. This element includes goals and policies to achieve an acceptable LOS by 2030; to optimize the use of the County's transportation facilities; minimize the negative impacts of transportation in the County; and to provide a public road and highway network for the efficient and safe movement of people and commodities. The element also includes goals and policies focused on maintaining and enhancing scenic highways and promoting safe and efficient public transit, air, rail, and bicycle transportation.

While no longer used for CEQA analysis, 2010 General Plan Circulation Goal C-1 states that the County shall achieve an acceptable LOS by 2030. Policy C-1.1 establish that the acceptable level of service for County roads and intersections shall be LOS D, except in specific circumstances. Policies C-1.2 through C-1.12 provide specific policies that aimed at achieve the intent of Goal C-1.

## Area and Master Plans

#### *Carmel Valley Master Plan*

Policies CV-2.1 through CV-2.19 of the Carmel Valley Master Plan guide future transportation planning in the Carmel Valley area. In particular, Policy CV-2.1 requires all new development to include a road system not only adequate for its internally generated automobile traffic, but also for bus (transit and school), pedestrian, and bicycle traffic, whenever feasible.

While no longer used for CEQA analysis, Carmel Valley Master Plan, Policy CV-2.17 provide specific standards related to acceptable LOS and average daily traffic (ADT) for roadways within the plan area. Acceptable LOS include LOS C for signalized intersections, LOS F for unsignalized intersections, LOS C for specified segments of Carmel Valley Road and LOS D for specified segments of Carmel Valley Road. CV-2.18 requires establishment and adoption of a Carmel Valley Traffic Improvement Program.

#### *Greater Monterey Peninsula Area Plan*

Policies GMP-2.1 through GMP-2.9 of the Greater Monterey Peninsula Area Plan guide future transportation planning in the Greater Monterey Peninsula area. These policies encourage

alternative modes of transportation, staggered business hours for commercial uses, and alternative connections between Salinas and the Monterey Peninsula to minimize peak hour congestion on Highway 68. Policy GMP-2.4 prohibits creation of new direct access points from single-family residences onto Highway 68 or Laureles Grade, unless there is no other feasible access.

#### *Fort Ord Master Plan*

The Circulation Element of the Fort Ord Master Plan includes objectives, policies, and programs for streets and roads, parking, bus and rail services, the pedestrian and bicycle network, transportation demand management, and land use and transportation. Specifically, Transportation Demand Management Policy A-1 and programs thereunder encourage transportation demand management programs and Congestion Management Plan trip reduction programs.

#### *Greater Salinas Area Plan*

Policies GS-2.1 through GS-2.4 of the Greater Salinas Area Plan are related to the U.S. Route 101 bypass and designating Old Stage Road as a scenic road.

#### *North County Area Plan (Inland)*

Policies NC-2.1 and NC-2.2 of the North County Area Plan are for the rerouting of U.S. Route 101 to bypass Prunedale and to preserve the historical value of Old Stage Road with the continuance of agrarian land use activities along its route.

#### *Toro Area Plan*

Policies T-2.1 through T-2.10 of the Toro Area Plan guide future transportation planning in the Toro area. These policies encourage alternative modes of transportation, staggered business hours for commercial uses, and alternative connections between Salinas and the Monterey Peninsula to minimize peak hour congestion on Highway 68. Policy GMP-2.7 prohibits creation of new direct access points from single-family residences onto Highway 68 and discourages access points onto Laureles Grade, River Road, Corral de Tierra Road, and San Benancio Road, to minimize traffic safety hazards.

### Community Plans

#### *Castroville Community Plan*

The Castroville Community Plan includes a Circulation Plan with recommended circulation improvements that address the short-term and long-term circulation solutions for the community. Goals and policies focus on truck traffic; traffic congestion along Highways 1, 183, and 156; safe travel through traffic in the downtown area; and a safe and convenient pedestrian and bicycle network.

## 1982 General Plan (Coastal)

The 1982 General Plan includes objectives and policies to provide for adequate access to and circulation within residential areas, including Objective 27.2, Policy 27.2.2, and Policy 39.2.1.

## Monterey County Local Coastal Program – Land Use Plans

Key Policy 3.1.1, General Policies 3.1.2, Specific Policies 3.1.3, and Recommended Actions 3.1.4 of the North County Land Use Plan support upgrades to state highways within the North County coastal area and management of major County roads to accommodate traffic volumes at LOS C. Public transit is also encourages as a viable transportation alternative.

Key Policy 3.1.2, SR-1 and Transportation Policies 3.1.3, and Recommended Actions 3.1.4 of the Carmel Area Land Use Plan guide future use and development of SR-1 and all categories of land use related to and dependent on the highway. State Route 1 south of the Carmel River is intended to remain a two-lane highway.

## Monterey County Code

### *Title 12, Vehicle and Traffic*

#### Chapter 12.80 Voluntary Automobiles Trip Reduction

Chapter 12.80 of Monterey County Code (County Code) outlines the requirements for the Facilities Trip Reduction Ordinance, which provides land use considerations to help achieve the overall goals of 1.6 percent per year trip reduction, 1.35 average vehicle ridership or 60 percent drive alone rate for the County. The intent of this chapter is to ensure that new development, redevelopment, and expanse existing development contain the needed infrastructure and programs to, firstly, reduce the need to travel, and, secondly, to encourage alternative modes of travel.

#### Section 12.80.050 – Responsibilities of Residential Developers and Developments.

Section 12.80.050 requires that developers of all residential developments with 25 or more units to submit a Trip Reduction Checklist as part of the discretionary permit review process. The County is required to take into consideration the nature and size of the project when reviewing the Trip Reduction Checklist and determine the necessary programs as part of the permit approval process. After review of the Trip Reduction Checklist, the County may require, but not be limited to, one or all of the following programs from the developer. The County may require other measures to be added to or substituted for any or all of the above. Additional techniques for reducing trips are acceptable:

1. Provide ridesharing, public transportation, and nearby licensed childcare facility information to tenants/buyers as part of move-in materials.
2. Print transit scheduling information on all promotional materials.

3. Install bicycle amenities, such as bicycle racks and bicycle lanes (where appropriate), paths and routes, and at intermodal connection points.
4. Provide bus pull-outs, pedestrian access, transit stops, shelters and amenities as part of the site plan, as described in the MST Development Review Guidebook or subsequent publications.
5. Provide locked and secure transportation information centers or kiosks with bus route and schedule information, as part of common areas.
6. Provide pedestrian facilities linking transit stops and common areas.
7. Provide financial resources for site amenities that reduce vehicle trips.
8. Provide park-and-ride facilities.
9. Provide on-site childcare facilities.
10. Provide local transportation demand management (TDM) improvements defined as shuttle bus services or bus pools or improved transit service as part of the development.
11. Provide facilities such as computers and modems to encourage telecommuting.
12. Provide trip generation fees with proceeds to go toward provision of transit service, Transportation Management Associations, ridesharing services and other alternative transport services.
13. Provide mixed land uses designed to reduce the length and number of vehicle trips where permitted by the zoning ordinance.
14. Provide pedestrian and bicycle system improvements.
15. Provide transit-oriented design or pedestrian oriented design, or both.

### *Title 21 – Zoning (Inland)*

#### Section 21.64.250 – Regulations for the reduction of vehicle trips for certain developments.

Section 21.64.250 of the County Code provides requirements to reduce vehicle trips in certain developments by ensuring that new developments, redevelopment, and expansion of existing developments contain the infrastructure and programs needed to reduce the need to travel and to encourage alternative modes of travel. Applicable developments include any new development project that proposes a residential development of 25 or more units; a new or expanded commercial, industrial, or tourist-oriented development which will employ 50 or more people; or a new or expanded commercial, industrial, or tourist-oriented development of 25,000 gross square feet or more. Developers of all proposed applicable developments must submit a Trip Reduction Checklist as part of the ministerial or discretionary permit application materials for the proposed applicable development. The checklist and site development must identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development.

### *Title 20 – Coastal Zoning (Coastal)*

**Section 20.64.250 – Regulations for the reduction of vehicle trips for certain developments.**

Section 20.64.250 of the County Code provides requirements to reduce vehicle trips in certain developments through the same requirements as described for Section 21.64.250 above.

### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.120 (Transportation Development Standards) of the Coastal Implementation Plan provides development standards intended to result in the: 1) upgrading of the state highways; 2) expansion and management of major County roads to accommodate traffic volumes at Service Level C; and 3) expansion of public transit to provide a viable transportation alternative. A traffic study is required for all development proposals with potential to significantly impact the service level of or traffic safety along SR-1, or where such impacts are unknown or in dispute, as determined by the County Public Works Facilities and Parks Department.

Carmel Area (Part 4) Section 20.144.100 (Transportation Development Standards) guides future use and development of SR-1 and all categories of land use related to and dependent on the highway and to see that State Route 1 south of the Carmel River remains a two-lane highway. The SR-1 and Transportation Development Standards discourage private roads off SR-1 and requires a fair-share contribution toward improvements of SR-1 for major development projects, including residential uses.

## 2018 Active Transportation Plan for Monterey County

As stated in Section 4.16.1.3, TAMC is in the process of updating the 2018 ATP. The 2018 ATP is an update of the 2011 Bicycle and Pedestrian Master Plan, which identified all existing and proposed bicycle and pedestrian facilities in Monterey County. The vision for the ATP is that active transportation will be an integral, convenient and safe part of daily life in Monterey County for residents and visitors of all ages and abilities.

## 2026 Monterey County Zero Emissions Shared Mobility Study

In 2026, Monterey County completed the Zero Emissions Shared Mobility Study, a countywide planning effort that evaluated existing transportation conditions, mobility needs, and opportunities to expand zero-emissions and shared transportation options. The study assessed existing transit, vanpool, rideshare, micromobility, and active transportation networks; identified transportation gaps and barriers to mobility; and developed conceptual recommendations to improve access to jobs, services, and destinations while reducing vehicle dependence, VMT, and transportation-related greenhouse gas emissions. Recommended strategies include mobility hubs, shared electric vehicle programs, micromobility services, expanded shuttle and transit connections, and other multimodal transportation improvements. The study is intended to serve as a planning and policy resource for

future transportation investments and programs. Its recommendations are conceptual and nonbinding, are not funded or committed for implementation, and do not constitute adopted County policy or regulatory requirements. Any future transportation improvements or programs identified in the study would be subject to separate funding decisions, agency approvals, and project-specific environmental review, as applicable.

## 4.16.2 Environmental Setting

### 4.16.2.1 Transit Mobility

MST is the public transportation system serving Monterey County and provides fixed-route bus services and demand-responsive services within Monterey County, including bus rapid transit. They provide regional routes with service to Santa Cruz County, intercity routes and local routes with service covering 161 square miles and 906 stops throughout Monterey County. Figures 1 and 2 of the VMT Memo (included as Appendix L to the PEIR) provide an overview map of the existing MST routes and the existing rail service provided by Amtrak, respectively. All opportunity sites except Opportunity Site 4, 8, 16, 24, and 42 are located within a 0.5 mile buffer zone of a transit stop[1]. Figures 6 and 7 of the VMT Memo shows the existing transit stops and a 0.5-mile buffer around each transit stop.

The rail service is a long-distance passenger rail service providing access to scenic destinations along the California Coast. Figure 3 of the VMT Memo (included as Appendix L to the PEIR) shows the vision for future rail service in the region, which is elaborated on in the Monterey Bay Area Network Integration Study (TAMC 2021). The plan for future rail services is consistent with the California State Rail Plan which establishes a long-term vision for an integrated, cohesive statewide passenger and freight rail system.

Other transit service in Monterey County includes Greyhound Bus Lines which provides inter-county service linking Monterey County with adjacent counties as well as a regional vanpool service operated by the California Vanpool Authority which organizes both traditional vanpools and vanpools serving agricultural workers.

### 4.16.2.2 Bicycle Conditions

Bicycle facilities are integral components of Monterey County's multimodal transportation system. Monterey County has approximately 213 miles of maintained bikeways on state, county, and local roads. The majority of bikeways in Monterey County are Class II (bicycle lanes) and Class III (bicycle routes); however, large Class I facilities exist along the Monterey Peninsula coastline. Figure 4.16-1, North County Bike Network with Buffer, and Figure 4.16-2, South County Bike Network with Buffer, illustrate existing and proposed bicycle facilities for north and

[1] The HEU6 identifies a total capacity of 320 housing units on Opportunity Sites 4, 8, 16, 24, and 42 under the reasonable buildout capacity scenario (7 percent of a reasonable buildout capacity of 4,434 units).

south Monterey County. All opportunity sites except Opportunity Sites 8, 16, and 39[2] are within a 0.5-mile buffer of existing or proposed bikeway.

#### 4.16.2.3 Pedestrian Conditions

Pedestrian facilities are integral components of UMC's multimodal transportation system. Pedestrian facilities also serve as a critical tool to advance transportation equity in the UMC. However, comprehensive data is not available for the pedestrian network.

### 4.16.3 Method of Analysis

#### Multimodal Methodology

The impact of the proposed housing units is assessed based on their proximity to transit facilities, bikeway and pedestrian facilities. This includes a specific focus on location within a half-mile radius, and bikeway and pedestrian connections to those sites. To conduct this evaluation, 0.5-mile buffer zones were created from transit stop data obtained from MST and bicycle facility data provided by TAMC. There is no known source of comprehensive data on pedestrian facilities. The resulting buffer zones were then compared to the proposed opportunity sites in the HEU6. The process for creating the buffers and completing the analysis is described in more detail below:

1. **Setting Up the Network Dataset:** To perform network analysis, a network dataset is required. The following steps outline the creation and setup:
   - **Create Network Dataset:** Using GIS software, create a network dataset from the UMC's street and transit network data.
   - **Incorporate Data:** Add the transit stop locations and routes, and bikeways into the network dataset.
   - **Configure Network Analyst:** Set up the Network Analyst tool within the GIS software to recognize transit stops and routes.
2. **Buffer Zone Creation:** Buffer zones are created to represent areas within a specific distance from transit stops and bikeways. The following steps are performed:
   - **Define Buffer Distance:** Establish a buffer distance of a half-mile (0.5 miles) around each transit stops.
   - **Generate Buffers:** Create buffer zones around each transit stop. This involves calculating the network distance and straight-line distance to account for actual travel paths.

[2] The HEU6 identifies a total capacity of 129 housing units on Opportunity Site 8, 16, and 39 under the reasonable buildout capacity scenario (3 percent of a reasonable buildout capacity of 4,434 units).

3. **Spatial Analysis:** The proximity of proposed housing units to transit stop is analyzed as follows:
    - **Overlay Analysis:** Overlay the buffer zones with the proposed housing unit locations.
    - **Identify Impacted Units:** Identify housing units that fall within the half-mile buffer zones around transit stops.
    - **Impact Assessment:** Assess the impact of the proposed housing units based on their proximity to transit stops and bikeways. Units within the half-mile buffer zones are considered to have no impact on transit accessibility and bikeways.

## Vehicle Miles Traveled Methodology

Section 15064.3 of the CEQA Guidelines provides that VMT is the most appropriate metric for the analysis of transportation impacts under CEQA. To determine if there were significant impacts related to transportation, VMT from residential and employment-based land uses was analyzed as described in the methodology section below.

The Association of Monterey Bay Area Governments Regional Travel Demand Model (AMBAG RTDM),[3] served as a tool for calculating VMT. The land uses were evaluated based on the following scenarios:

- **Baseline –** 2023 land use in the incorporated and unincorporated areas of the UMC.
- **2031 No Project –** 2031 land uses in the incorporated and unincorporated areas based on the Housing Element Update in the UMC.
- **2031 With Project –** 2031 land uses in the incorporated and unincorporated areas based on the Housing Element Update in the UMC.

The AMBAG RTDM has a base year of 2015 and a future year of 2045; however, the baseline year for the proposed project is 2023, and the horizon year is 2031. Additionally, the AMBAG model is calibrated to a tri-County area (Monterey, San Benito, and Santa Cruz Counties). To address the discrepancy in the baseline year and the horizon year, as well as conduct a more locally specific VMT analysis, Replica,[4] a big traffic and mobility data source, was used to calculate the baseline VMT per capita and VMT per employee. The growth over time was obtained using the AMBAG RTDM by calculating the percentage difference in VMT for each land use and applying that percentage as growth to the Replica baseline VMT.

[3] The 2018 RTDM is a technical update only to the 2014 RTDM. The AMBAG RTDM was provided to Kimley-Horn, the traffic consultant for this project, by AMBAG staff in September 2022.

[4] Replica is a big traffic and mobility data provided by the company Replica HQ. It uses big data sources and statistical modeling to create large-scale datasets and insights for public agencies and infrastructure decision-makers. These datasets include high-fidelity, anonymized data on vehicle and pedestrian movements, traffic volumes (like AADT), and activity-based travel models. Replica data is provided by Census Block Group rather than by TAZ. To account for this each TAZ was associated with a Block Group. The percent difference was calculated using a weighted average for population and employment within each Block Group. This percent difference was then applied to the Replica VMT per capita and VMT per employee for each Block Group to calculate VMT growth for the 2031 No Project and 2031 with project scenario.

VMT per capita and VMT per employee were computed by dividing the residential and non-residential VMT by the UMC Traffic Analysis Zone by the total population or total employees.

More detailed VMT model input assumptions are described in Appendix L, VMT Memorandum.

## 4.16.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on transportation if it would:

- **Threshold 1:** Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- **Threshold 2:** Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- **Threshold 3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- **Threshold 4:** Result in inadequate emergency access.

### Vehicle Miles Traveled Thresholds of Significance

In January 2019, the California Natural Resources Agency finalized updates to the CEQA Guidelines, including the incorporation of SB 743 modifications. The CEQA Guidelines changes were approved by the Office of Administrative Law and are now in effect. Specific to SB 743, CEQA Guidelines, Section 15064.3(c), states, "The provisions apply statewide as of July 1, 2020." To aid lead agencies with SB 743 implementation, the OPR produced a VMT Analysis Guidelines document that included detailed guidance about the variety of implementation questions with respect to shifting to a VMT metric (OPR 2018).

Analysis was performed for the project based on the OPR guidelines for the determination of VMT related impacts. The resulting VMT thresholds consider the VMT performance of residential and non-residential components of a project separately, using the efficiency metrics of VMT per capita and VMT per employee, respectively. It should be noted that the County has not officially adopted thresholds. However, the thresholds presented here are based on OPR (now LCI), Guidance:

- **Residential:** 15 percent below baseline (existing) average VMT per capita
- **Employment-Based Land Uses:** Office, service, professional services – 15 percent below baseline (existing) average VMT per employee
- **Retail:** Net change

***Governor's Office of Planning and Research Technical Advisory's Vehicle Miles Traveled Screening Criteria***

OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018) identifies the following common screening approaches for land use projects:

- Small Project Screening[5] – Small residential projects generating a limited number of daily vehicle trips (often using a local agency threshold such as fewer than 110 daily trips, consistent with common CEQA screening practices) may be screened from detailed VMT analysis because their contribution to regional VMT is negligible.
- Map-Based Screening – Residential projects located in an area where existing household VMT is at least 15 percent below the regional average may be presumed to have a less than significant VMT impact.
- Transit Priority Area Screening – Residential projects located within one-half mile of an existing major transit stop or an existing stop along a high-quality transit corridor may qualify for screening, provided there is no substantial evidence indicating unusual circumstances that would result in above-average VMT.
- Affordable Housing Screening – Residential projects consisting of deed-restricted affordable housing for lower-income households may be presumed to have a less than significant VMT impact because lower-income households generally generate less VMT than regional averages.

## 4.16.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to transportation that could result from implementation of the project.

### 4.16.5.1 Threshold 1: Circulation System Performance

**Threshold 1:** Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

### Impact Analysis

As discussed below, the following plans are applicable to the project, and the project would not conflict with those programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

[5] Cleveland National Forest Foundation v. County of San Diego (2025) 110 Cal.App.5th 543, reaffirmed that the LCI's Technical Advisory is nonbinding guidance and that agencies must support their adopted methodologies with substantial evidence. Accordingly, this information is included for informational purposes only and the County does not rely on the Technical Advisory's recommended screening criteria in this EIR.

## California Department of Transportation

### *Active Transportation Plan for California Department of Transportation District 5*

As discussed in Section 4.16.1.2 under the Active Transportation Plan for Caltrans District 5 (2025) subheading, the District 5 ATP includes a prioritized list of bicycle and pedestrian needs along and across the state highway system. The project would not interfere with, degrade, or prevent the implementation of existing or planned active transportation infrastructure and the opportunity sites do not physically conflict with or obstruct any existing or planned transit stops, stations, or active transportation corridors. Therefore, the project would not conflict with Caltrans ATP.

### *2022 Association of Monterey Bay Area Government Metropolitan Transportation Plan and the Sustainable Communities Strategy*

AMBAG is the Metropolitan Planning Organization for the Monterey Bay Area and prepares the MTP which is a coordinated 20-year plan outlining transportation needs for San Benito, Santa Cruz and Monterey Counties.

The project would facilitate the development of various income level housing throughout Monterey County. Increasing housing supply for all income levels, including affordable housing near transportation corridors would not conflict with the planned improvements in the RTP.

### *Transportation Agency of Monterey County 2018 Active Transportation Plan for Monterey County*

The TAMC ATP identifies the existing and proposed active transportation facilities in Monterey County. Its vision is for active transportation to be an integral, convenient, and safe part of daily life in Monterey County, and it has the following goals to support this vision.

- **Active Transportation Trips:** Increase the proportion of trips accomplished by biking and walking throughout Monterey County.
- **Safety:** Improve bicycle and pedestrian safety.
- **Connectivity:** Remove gaps and enhance bicycle and pedestrian network connectivity.
- **Equity:** Provide improved bicycle and pedestrian access to diverse areas and populations in Monterey County via public engagement, program delivery and capital investment.
- **Education:** Increase awareness of the environmental and public health benefits of bicycling and walking for transportation and recreation.
- **Quality Facilities:** Improve the quality of the bike and pedestrian network through innovative design and maintenance of existing facilities.

Section 5.1 of the 2018 TAMC ATP, Unincorporated Monterey County, identifies recommended active transportation improvements within the unincorporated county. The recommended bicycle improvements include approximately 390 miles of bike paths, bike lanes, and bike routes, which are prioritized and ranked from 1 to 136 based on their relative importance within the UMC. The

plan also identifies approximately 5.7 miles of recommended pedestrian improvements in the communities of Castroville, Chualar, San Lucas, and San Ardo. These improvements include 10 sidewalk projects in San Ardo, eight in San Lucas, nine in Chualar, and 18 in Castroville. In addition, the plan recommends one pedestrian intersection improvement and one curb-and-gutter improvement in Castroville. Unlike the bicycle improvements, the pedestrian improvements are not prioritized or ranked.

The project would not conflict with the vision and goals of the TAMC ATP. Each individual project would be required to be processed through development application and comply with existing County requirements that are related to bicycle and pedestrian access and safety, and provide improvements in compliance with the ATP and the 2010 General Plan and Local Coastal Program roadway classifications, where applicable. The project would not interfere with, degrade, or prevent the implementation of existing or planned active transportation infrastructure and the opportunity sites do not physically conflict with or obstruct any existing or planned transit stops, stations, or active transportation corridors. Furthermore, 53 of the 56 opportunity sites are within 0.5 mile of bicycle facilities, and applicable bicycle and pedestrian improvements and/or active transportation supporting features would need to be provided, or fair-share fees would be collected based on the Regional Development Impact Fee program administered by the TAMC.

Furthermore, the County Code's Chapters 20.58 and 21.58 (zoning), Regulations for Parking, for coastal and inland, respectively require bicycle racks for parking lots with 20 or more spaces. During the design review and site plan review of each development project, sidewalk, pedestrian path, and/or bikeway improvements for properties that front County-maintained roadways would be required as applicable to ensure consistency with the ATP. Projects streamlining under the Objective Process would also be required to provide appropriate active transportation improvements (e.g., bike parking, storage, or other improvements) through implementation of by-right housing ordinance that includes objective design standards. Therefore, the project would not conflict with the TAMC ATP.

#### *2015 Marina-Salinas Multimodal Corridor Conceptual Plan*

The Marina-Salinas Multimodal Corridor Plan was developed in response to the need for a regional route through the former Fort Ord area that will increase roadway capacity by prioritizing high-quality transit, bicycling and walking as viable alternatives to driving. There are opportunity sites near the Marina-Salinas Multimodal Corridor alignment (e.g., Opportunity Sites 53, 31, 16). However, the project would not require changes to the existing alignment, and development of housing units near the alignment would encourage the use of the multimodal transportation options. Therefore, the project does not conflict with the Marina-Salinas Multimodal Corridor Conceptual Plan.

### *2021 Monterey Bay Area Rail Network Integration Study*

This plan envisions an integrated train and bus network to support regional growth and support state and federal climate action and equity goals. The Initial Service scenario creates a regular passenger rail connection between the Monterey Bay Area and San Francisco Bay Area and lays the foundation for future expansion. The phased scenario includes increased passenger rail service and bus connections. The Vision Service scenario is a long-term vision for rail service in Monterey County. The project would not require changes to any of the rail service network infrastructure or services. Additional housing development in the UMC would not interfere with integrating train and bus network to support regional growth. Opportunity sites do not interfere with the existing and proposed intermodal station projects identified in this study and would not conflict with implementation of this study. The project would not conflict with any existing or future rail network pursuant to the Monterey Bay Area Rail Network Integration Study.

### *Fort Ord Regional Trail and Greenway*

The purpose of Fort Ord Regional Trail and Greenway (FORTAG) is to provide an accessible multi-use path for recreation and active transportation for residents and visitors. FORTAG supports the following objectives that are relevant to the project:

- Function as an active transportation artery for commuting and recreation, providing a safe, accessible, and separated alternative to motorized travel that reduces vehicle trips and associated emissions.
- Connect people to open space and recreational activities from their homes, workplaces, and hospitality bases.
- Enhance connections between Fort Ord, Monterey Peninsula, and Salinas Valley communities, and provide additional opportunities for physical exercise and stress reduction for residents and visitors.

There are opportunity sites near FORTAG (e.g., Opportunity Sites 46, 47, 53, 31, 16)[6]. However, the project would not require changes to the existing FORTAG trail system and would not interfere with its function to provide a safe, accessible, and separate alternative to provide non-motorized access to reduce vehicle trips. Development of housing units near FORTAG would encourage the use of the multimodal transportation options. Therefore, the project would not conflict with the FORTAG.

### *2022 Monterey County Regional Transportation Plan*

The RTP for Monterey County is a 20-year plan that outlines how to address Monterey County's transportation needs and includes transportation projects to meet those needs. The following transportation policies are relevant to the project.

[6] https://fortag.org/maps/FORTAG_ConceptualDesignReport_Map1.png; https://www.tamcmonterey.org/fort-ord-regional-trail-greenway,

- Increase affordability, accessibility and safety between key origins and destinations in the region.
- Reduce greenhouse gas emissions consistent with regional targets.

The project would facilitate development of various income level housing throughout Monterey County. Increasing housing supply for all income levels, including affordable housing near transportation corridors would not conflict with the planned improvements in the RTP.

#### *2022 Comprehensive Operational Analysis Final Network Plan*

Developed by MST, this plan includes a preferred scenario that increases service frequency as well as the number of people located near transit. This service scenario was based on extensive public outreach and direction from the MST Board of Directors to focus a little more on ridership, to prioritize the travel needs of low-income communities, and to shift more service to Salinas and regional routes. The proposed project does not conflict with this plan because the project would not interfere with MST's ability to operate its services and implement various scenarios affecting service frequency and routes. The project also would not interfere with, degrade, or prevent the existing or planned transit infrastructure or service. Fifty-one of the 56 opportunity sites are within a 0.5-mile vicinity of a transit stop. The project would facilitate development of housing units near transit facilities and would benefit from the increased frequency of services and expanded routes proposed under this plan. Therefore, the project would be consistent with the intent of the Comprehensive Operational Analysis Final Network Plan. No conflict would occur.

#### *2010 General Plan and Local Coastal Program Land Use Plans*

The 2010 General Plan is a guide for future development and land use in the UMC. It sets rules and goals to help make sure that growth is safe, protects the environment, and meets the needs of the community. The Circulation Element of the 2010 General Plan identifies the general location and extent of existing and proposed major transportation facilities for vehicle, rail, air, water, and bicycle transportation.

The policies relating to VMT as they relate to transit, roadway, bicycle, and pedestrian facilities and the project's consistency with those policies are shown in Table 4.16-1, Monterey County General Plan and Land Use Plan Consistency Analysis. The 2010 General Plan includes a number of policies related to LOS, and the County Public Works, Facilities, and Parks use LOS to prioritize roadway improvements. However, because LOS is no longer considered to be an impact under CEQA, those goals and policies are not included in this consistency analysis and are not considered part of the transportation impacts analysis. Individual projects would be required to undergo mobility assessment at the time of project application separate from CEQA processing.

Table 4.16-1 provides an overview of the project's consistency with Monterey County General Plan and Land Use Plan regulations related to transportation. Opportunity Sites are required to

comply with all General Plan element and Land Use Plan policies. Supplemental policies for specific areas of UMC are included below by Area Plan, Master Plan or Community Plan with corresponding opportunity sites listed.

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| **Circulation Element** | |
| Policy C-1.3: Circulation improvements that mitigate Traffic Tier 1 direct on-site and off-site project impacts shall be constructed concurrently (as defined in subparagraph (a) only of the definition for "concurrency") with new development. Off-site circulation improvements that mitigate Traffic Tier 2 or Traffic Tier 3 impacts either shall:<br>a. be constructed concurrently with new development, or<br>b. a fair-share payment pursuant to Policy C-1.8 (County Traffic Impact Fee), Policy C-1.11 (Regional Development Impact Fee), and/or other applicable traffic fee programs shall be made at the discretion of the County. | Consistent. The project could result in increased demand for on- and off-site circulation improvements due to future housing development. However, while the project plans for future growth, it does not propose any specific development projects within the UMC at this time. As individual developments are proposed, each application will be reviewed for applicability and assessed for any applicable impact fees or necessary improvements. Therefore, the project does not conflict with this policy. |
| Policy C-2.2: Existing and proposed public transportation facilities shall be protected from the encroachment of incompatible land uses. | Consistent. Housing is a compatible land use with transit and affordable housing is often paired with transit facilities to improve access and mobility for households that have a lower rate of automobile ownership. The project includes planning for housing growth in areas served by alternative modes of transportation, including public transit and bicycle facilities. Site selection strategies focused on planning for growth in areas of UMC that are designated for growth, including in Community Areas, Rural Centers, areas designated with Affordable Housing Overlays and or within proximity to incorporated cities. Therefore, the location of housing provided for in the project there is no conflict with this policy. |
| Policy C-2.3: The safety standards established by transportation-related agencies shall be supported and be used to guide land use to ensure the safe operation of the County's transportation systems. | Consistent. There are no inherent transportation safety issues with high density housing projects. As development is proposed, each project will be reviewed according to adopted safety standards and they are required to comply with applicable County roadway design standards, Caltrans design and access requirements for state facilities, ADA accessibility requirements, emergency access standards, and other applicable transportation engineering and safety standards during subsequent discretionary review. Compliance with these standards would help ensure that future development provides safe access and circulation for motorists, pedestrians, bicyclists, transit users, and emergency responders and would not interfere with the safe operation of the County's transportation system. The HEU6 includes adoption of objective design standards for projects streamlining under the Objective Process to follows. However, they do not include specific design criteria that would conflict with safety standards. No conflict would occur. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| Policy C-2.4: A reduction of the number of vehicle miles traveled per person shall be encouraged. | Consistent. Occupants of housing projects with an affordability component exhibit lower vehicle ownership rates and 100% affordable housing projects are generally presumed to have a less than significant impact on VMT per statewide guidance and standards. As described in Section 4.16.4, Thresholds of Significance, OPR Technical Advisory includes affordable housing screening, where residential projects consisting of deed-restricted affordable housing for lower-income households may be presumed to have a less than significant VMT impact because lower-income household generally generate less VMT than regional average, and California Air Pollution Control Officers Association (CAPCOA) Guide for Quantifying guide for Quantifying Greenhouse Gas Mitigation Measures, one of the primary bases for estimating mitigation effects in California, identifies integrating affordable and below-market-rate housing (Measure T-4) as potentially reducing up to 28 percent of greenhouse gas (GHG) emissions from multi-family residential projects. The HEU6 promotes high density housing with affordability components, therefore encourages a reduction of VMT per person. The project would not conflict with this policy. |
| Policy C-2.5: Overall land use patterns that reduce the need to travel by automobile shall be encouraged. | Consistent. The proposed HEU6 includes land uses within proximity to bicycle facilities and transit stops and therefore supports this policy. Additionally, there are a number of policies within the plan supporting housing development near public transit facilities including policies programs H-2.G, H-5.B. and Policy H-3.8. Program H-2.G includes providing incentives and density bonus concessions for developments that provide transit-oriented development (TOD). Policy H-3.8 states that the County will explore collaboration with cities to prepare growth strategies that provide for housing near jobs and transit. Program H-5.B commits to identifying sites that comply with SB-10 and amending development standards to facilitate development in transit rich areas. The proposed project does not conflict with this policy. |
| Policy C-2.7: New development shall be located and designed with convenient access and efficient transportation for all intended users and, where possible, consider alternative transportation modes. | Consistent. The project includes land uses within proximity to bicycle facilities and transit stops and therefore supports this policy (Refer to Figures 4.16-1 through 4.16-4).Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G, and H-5.B and program H-3.8. The proposed project does not conflict with this policy. |
| Policy C-4.2: All new road and interior circulation systems shall be designed, developed, and maintained according to adopted County standards or allowed through specific agreements and plans. | Consistent. The project is an update to the County's Housing Element. Any development proposing new roads or interior circulation systems would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| Policy C-4.3: The needs of bicyclists and pedestrians, as well as provisions for utilities and drainage, shall be considered and, where appropriate, provided in all public rights-of-way in a manner that minimizes impacts on adjacent land uses. | Consistent. The project is an update to the County's Housing Element. Any development proposing new roads or interior circulation systems would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |
| Policy C-4.5: New public local and collector roads shall be located and designed to minimize disruption of existing development, discourage through auto traffic and provide for bicycle and pedestrian traffic within the right-of-way. | Consistent. The project is an update to the County's Housing Element and does not include any new roadways at this time. Any development proposing new roads would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |
| Policy C-4.6: Driveways, mid-block access points, intersections and on-street parking along major roads and highways shall be minimized and consolidated. | Consistent. The project is an update to the County's Housing Element. Any development including new driveways would be reviewed for site access and crossings at the time of application. The project does not conflict with this policy. |
| Policy C-4.7: Where appropriate and sufficient public right-of-way is available, bicycle paths shall be separated from major roads and highways and be provided between adjacent communities. | Consistent. The project is an update to the County's Housing Element. Any development proposing new bicycle facilities and right-of-way would be reviewed for at the time of application. The project does not conflict with this policy. |
| Goal C-5: Maintain and enhance a system of scenic roads and highways through areas of scenic beauty without imposing undue restrictions on private property or constricting the normal flow of traffic. | Consistent. There are opportunity sites that are adjacent to designated scenic roads and highways and areas designated as having scenic sensitivity. However, with proper grading and site and design elements, those opportunity sites would be able to be developed without having significant impacts on scenic vista. Maintaining adequate traffic flow and level of service would be reviewed for consistency according to County standards and regulations at time of application. The project does not conflict with this policy. |
| Policy C-5.4: Land use controls shall be applied or retained to protect the Scenic Highway Corridor and to encourage sensitive selection of sites and open space preservation within such areas. Where land is designated for development at a density that would create a substantial adverse visual impact, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the Scenic Highway corridor. | Consistent. This policy protects Scenic Highway Corridors by applying land use controls and to encourage sensitive selection of sites and open space preservation. From a transportation and circulation perspective, the project is consistent because it does not propose any physical alterations to the designated scenic highway right-of-way, nor does it introduce circulation infrastructure that would conflict with the established scenic corridor boundaries or controls. The detailed analysis of the project's visual compatibility and consistency with the Scenic Highway Corridor is addressed in the PEIR Section 4.1, Aesthetics. Project-specific impacts would be reviewed for consistency with County regulations at time of application. The project does not conflict with this policy. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
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| Policy C-6.2: Major traffic generating events, activities and development shall provide facilities adequate to meet the anticipated demand and to encourage the use of mass transit options, consistent with the Monterey-Salinas Transit's Designing for Transit manual. | Consistent. The project is an update to the County's Housing Element, however as specific developments are proposed there are sufficient review mechanisms in place to review the proposed facilities for adequacy of demand. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including programs H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| Policy C-6.3: The County shall encourage new development to concentrate along major transportation corridors and near cities to make transit services to these areas more feasible. | Consistent. Approximately 93 percent of the proposed housing units for housing are within 0.5 mile of transit stops. Although these transit facilities do not qualify as high-quality transit stops or corridors pursuant to the CEQA Guidelines, their presence demonstrates that transit service is available to these housing units. The HEU6 also includes opportunity sites located along major transportation corridors and in proximity to the Cities of Salinas, Carmel-by-the-Sea, Marina, and Monterey. In addition, one opportunity site is located within the incorporated limits of the City of Marina. Therefore, the project does not conflict with this policy. |
| Policy C-6.5: The County shall encourage use of public transit and alternative modes of transportation through land use designations and zoning which cluster employment centers with a mix of other uses, and project design that incorporates carpool areas, "park and ride" facilities and similar incentives. | Consistent. The project proposes land uses within 0.5 mile proximity to bicycle facilities and transit stops for most opportunity sites. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including programs H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| Policy C-7.1: The County shall prohibit land use activities that interfere with the safe operation of aircraft. | Consistent. Housing is proposed within the Airport Influence Area for the Marina Municipal Airport and the Monterey Regional Airport. Opportunity Sites 46, 47, and 52 are located within the Airport Influence Area (AIA) of the Monterey Regional Airport Land Use Compatibility Plan (ALUCP) and Opportunity Sites 31 and 53 are located within the AIA of the Marina Municipal Airport ALUCP. The HEU6 proposes split zoning for Opportunity Sites 46, 47, and 52 to minimize safety and environmental impacts. Opportunity Sites 31, 47, 52, and 53 are within Safety Zone 7 (AIA). Opportunity Site 46 is partially in Safety Zone 4 – Outer Approach/Departure Zone. Split zoning is proposed for Opportunity Site 46 to rezone portions of the site that are suitable for development and consistent with Part 77 regulations in addition to the density requirements of Safety Zone 4. Within Safety Zone 4, residential development is limited to one dwelling unit per two acres, and additional requirements apply, including airport disclosure notices and airspace review for structures exceeding 70 feet in height. Split Zoning is also proposed for Opportunity Site 47 to avoid impacts on Part 77 Airspace. Development of housing on these opportunity sites within ALUCPs are subject to compliance with applicable compatibility standards, including airport disclosure requirements, airspace review for structures exceeding 100 feet in height, restrictions |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
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| | related to Federal Aviation Administration (FAA) Part 77 Airspace surfaces, and ALUC review for uses involving vulnerable occupants within specified distances from runways. Future development on these sites would remain subject to ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions. The HEU6 would allow development in a manner that would not interfere with the safe operation of aircraft. Therefore, the project does not conflict with this policy. The project does not conflict with this policy. |
| Policy C-7.2: Land uses in areas that may be impacted by airport operations shall be compatible with those operations and incorporate measures to mitigate potential safety and noise impacts on those uses. | Consistent. Refer to analysis for Policy C-7.1. Additionally, Opportunity Sites 46, 47, and 52 are outside Monterey Regional Airport's outermost noise contour (65 CNEL), and Opportunity Sites 31 and 53 are outside the outermost noise contour (55 CNEL). Therefore, noise generated by the airport would be less than 65 CNEL at the nearest receptor, consistent with the County's acceptable ambient noise levels for multi-family residential, and impacts would be less than significant. Additionally, the Airport Land Use Commission will recommend a recorded deed notice requirement as a condition of approval pertaining to safety and noise, as applicable. The project does not conflict with this policy. |
| Policy C-7.4: Land uses in the vicinity of public airports shall be consistent and compatible with the airport comprehensive land use plans. | Consistent. As discussed above and in further detail in Section 4.9, Hazards and Hazardous Materials, Opportunity Sites 46 and 47 will be split zoned to avoid impacts on Safety Zone 4 and Part 77 Airspace and ensure compatibility with safety requirements of the Monterey Regional Airport ALUCP. Therefore, the project is not inconsistent with any airport land use plans. |
| Policy C-8.4: The County shall encourage transit-oriented development around existing and future rail, light rail, or bus rapid transit stations. | Consistent. The project proposes land uses within proximity to future rail stations in Castroville and Salinas. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including policy H-2.G, H-3.8, and H-5.B. The project does not conflict with this policy. |
| **Land Use Element** | |
| LU-1.4: Growth areas shall be designated only where an adequate level of services and facilities such as water, sewerage, fire and police protection, transportation, and schools exists or can be assured concurrent with growth and development. Phasing of development shall be required as necessary in growth areas in order to provide a basis for long-range services and facilities planning. | Consistent. The proposed opportunity sites are located along existing transportation facilities or near such facilities. As development is proposed, the County will review applications and require transportation facilities consistent with current access and mobility standards and regulations. The project does not conflict with this policy. |
| LU-1.19: Community Areas, Rural Centers and Affordable Housing Overlay districts are the top priority for development in the unincorporated areas of the County. Outside of those areas, a Development Evaluation System shall be established to provide a systematic, consistent, predictable, and quantitative method for decision-makers to | Consistent. The HEU6 proposes additional housing units to priority development areas such as Community Areas, Rural Centers, and Affordable Housing Overlays. Although there are opportunity sites outside of these areas, the project includes General Plan amendments to designate opportunity sites as priority development areas which are not subject to |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
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| evaluate developments of five or more lots or units and developments of equivalent or greater traffic, water, or wastewater intensity.[…] | Development Evaluation System requirements. The HEU6 provides a systematic, consistent, predictable, and quantitative analysis of housing needs and challenges based on affordable housing requirements. The project does not conflict with this policy. |
| LU-2.4: Areas designated for residential use shall be located with convenient access to employment, shopping, recreation, and transportation. Higher density residential areas should be located with convenient access to public transit. | Consistent. The HEU6 provides for opportunity sites near transportation facilities and provides detailed information on the number of jobs within a 45-minute commute by transit or vehicle. To the extent feasible and within the constraints of where the County has land use authority, opportunity sites are located near transit. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| LU-2.5: Adequate circulation rights-of-way shall be delineated within each residential area. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any necessary right-of-way needs. The project does not conflict with this policy. |
| **Conservation and Open Space Element** | |
| OS-9.2: Development shall be directed toward cities, Community Areas, and Rural Centers where energy expended for transportation and provision of services can be minimized. | Consistent. The HEU6 prioritizes development within existing and planned Community Areas, Rural Centers, Affordable Housing Overlays and in areas near cities where transportation facilities and services already exist. The project does not conflict with this policy. |
| OS-9.6: Development shall incorporate features that reduce energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design as appropriate. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed, County staff will review the application for consistency with access and transportation regulations and standards including any active transportation facilities. The project does not conflict with this policy. |
| **Safety Element** | |
| S-4.10: The County shall require the creation of road maintenance agreements for all new private subdivision roads. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed, County staff will review the application for consistency with access and transportation regulations and standards including any necessary right-of-way needs. If new roadways are proposed as part of the development, the County would require road maintenance agreements for new private subdivision roads. The project does not conflict with this policy. |
| S-5.17: Emergency Response Routes and Street Connectivity Plans shall be required for Community Areas and Rural Centers, and for any development producing traffic at an equivalent or greater level to five or more lots/units. Said Plan shall include: | Consistent. This policy mandates the creation of Emergency Response Routes and Street Connectivity Plans for specific areas and developments of five or more units. The Safety Element is currently being updated to comply with SB 99, AB 747, and AB 1409 to evaluate evacuation routes, their viability and capacity under a range of hazard scenarios, |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| a. Roadway connectivity that provides multiple routes for emergency response vehicles.<br>b. Primary and secondary response routes in Community Areas and Rural Centers.<br>c. Secondary response routes, which may include existing roads or new roads required as part of development proposals.<br>The County shall review said plans in coordination with the appropriate Fire District. | identify evacuation locations, and identify residential areas without two points of egress. The existing area and master plans evaluate circulation in those plan areas. The County's Emergency Operations Plan also discusses evacuation procedures and resources to address various types of hazards. The Mult-Jurisdictional Hazard Mitigation Plan is incorporated by reference into the County's Safety Element and it also discusses evacuation strategies in the County.<br>New residential development would be subject to the standard California Building Code, Fire Code, and local fire districts with jurisdiction reviews for secondary access, turnarounds, and connectivity at the time of application. Additionally, the project's impacts regarding wildfire and emergency evacuation (Thresholds 6 and 7) are discussed in Section 4.19, Wildfire. The project does not conflict with this policy. |
| **Public Services Element** | |
| PS-1.1: Adequate Public Facilities and Services (APFS) requirements shall:<br>a. Ensure that APFS needed to support new development are available to meet or exceed the level of service of "Infrastructure and Service Standards" (Table PS-1) concurrent with the impacts of such development;<br>b. Encourage development in infill areas where APFS are available, while acknowledging the rights of property owners to economically viable use of existing legal lots of record throughout the county; and<br>c. Seek to achieve acceptable level of service (LOS) standards through improvements funded by fair-share impact fees and planned capital improvements (CIFPs). | Consistent. The proposed project would continue to be subject to the APFS requirements as outlined in Table PS-1. Opportunity sites have been selected through a comprehensive screening process intended to identify locations where additional residential capacity could be accommodated, existing or planned availability of adequate infrastructure were one of the site selection criteria. Although LOS is no longer a CEQA issue, therefore, not addressed in this PEIR, it is noted that the County Public Works, Facilities, and Parks, would continue to prioritize roadway improvements based on LOS methodology, and each development project would be required to provide its fair-share impact fees to roadway improvements, including but not limited to planned capital improvements. Additionally, Table PS-1 requires that road intersection level of service, Improvements to be LOS D for Rural Centers and Community Areas. For Rural Centers, Table PS-1 also includes a footnote that states "Development in Rural Centers may proceed, even if the operating level of service is lower than the applicable LOS standard on adjacent roads, if the certified Housing Element in effect at the time requires that the land in question be made available for development to meet the County's Regional Housing Needs Allocation. Development will be required to participate in any applicable regional or local road impact fee program once adopted." The HEU6 provides for meeting the RHNA and therefore falls within the scope of this note. The project does not conflict with this policy. |
| **Carmel Valley Master Plan** | Opportunity Sites 17, 18, 19, 20, 21, 22, 23, 35, 36, 37, 38, 54, 55, 56 |
| CV-2.1: Public transit should be explored as an alternative to the use of private automobiles and to help preserve air quality. Whenever feasible all new development shall include a road system adequate not only for its internally | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| generated automobile traffic but also for bus (both transit and school), pedestrian, and bicycle traffic, which should logically pass through or be generated by the development. | including right-of-way allocation. The project does not conflict with this policy. |
| CV-2.5: Circulation in the village should emphasize pedestrian access. Walkways and paths are to be provided rather than conventional sidewalks. Pedestrian walkways should be used to provide access among new or remodeled commercial and other higher density uses. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including providing pedestrian access. Opportunity Site 55 is the only opportunity site that is located in Carmel Valley Village and would therefore be subject to this Policy. Each development application would be reviewed and applicable walkways and paths would be provided, rather than conventional sidewalks, if deemed necessary by the County. The proposed project does not conflict with this policy. |
| CV-2.6: Multiple driveway accesses to Carmel Valley Road should be discouraged. Approval of future development of land having frontage on Carmel Valley Road must be conditioned upon minimizing access to Carmel Valley Road, or denying it if access is otherwise available. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including driveway placement. The project does not conflict with this policy. |
| CV-2.14: New major developments with access adjacent to Carmel Valley Road shall be required to provide space for the transit buses to stop, the parking of cars, and facilities for the safe storage of bicycles. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including right-of-way allocation. The project does not conflict with this policy. |
| CV-3.14: Wherever possible a network of shortcut trails and bike paths should interconnect neighborhoods, developments, and roads. These should be closed to motor vehicles and their intent is to facilitate movement within the Valley without the use of automobiles. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any active transportation facilities, such as trails and bike paths. Each housing project are required to coordinate with the County Public Works, Facilities, and Parks, to provide the necessary trails and bike paths to connect neighborhoods and roads. Furthermore, the County Public Works, Facilities, and Parks has ongoing planning activities to provide improved active transportation connectivity including coordination with TAMC and Caltrans ATP planning processes. The project does not conflict with this policy. |
| **Fort Ord Master Plan** | Opportunity Sites 31, 47 |
| Fort Ord Master Plan Objective E: Coordinate the location, intensity, and mix of land uses with alternative transportation goals and transportation infrastructure.<br>Residential Land Use Policy E-1: The County of Monterey shall make land use decisions that support transportation alternatives to the automobile and encourage mixed-use projects and the highest-density residential projects along major transit and public transportation routes. | Consistent. The County has ongoing planning activities to provide improved transportation connectivity including coordination with other jurisdictions in the Fort Ord planning area, CSUMB, TAMC and Caltrans. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations including connectivity to the former Fort Ord |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| Program E-1.1: The County of Monterey shall prepare one or more specific plans for the UC MBEST Cooperative Planning District.<br>Program E-1.2: The County of Monterey shall prepare one or more specific plans for the East Garrison District and incorporate provisions to support transportation alternatives to the automobile.<br>Program E-1.3: The County of Monterey shall encourage the development of an integrated street pattern for new developments which provides linkages to the existing street network and discourages cul-de-sacs or dead-end streets. | planning area. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| Fort Ord Master Plan Fire, Flood, and Emergency Management Policy A-1: The county shall reduce fire hazard risks to an acceptable level by inventorying and assigning risk levels for wildfire hazards and regulating the type, density, location, and/or design and construction of new developments, both public and private. Program A-1.1: The County shall incorporate the recommendations of the Monterey County Regional Fire District for all residential, commercial, industrial, and public works projects to be constructed in high fire hazard areas at the former Fort Ord before a building permit can be issued. Such recommendations shall be in conformity with the current applicable Uniform Building Code Fire Hazards Policies. These recommendations should include standards of road widths, road access, building materials, distances around structures, and other standards for compliance with the UBC Fire Hazards Policies. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including roadway design. The project does not conflict with this policy. |
| Fort Ord Master Plan Transportation Demand Management Policy A-1: TDM programs shall be encouraged.<br>Program A-1.1: Promote TDM programs at work sites. Specific measures that can be pursued at the work site include: compressed work weeks, staggered/flexible work hours, telecommuting, on-site ridesharing, public transit subsidies, guaranteed ride home, bicycle facilities, and parking pricing.<br>Program A-1.2: Promote TDM programs in residential developments, retail centers, and other activity centers.<br>Program A-1.3: Require new development to incorporate design features that will strengthen TDM programs.<br>Program A-1.4: Enforce Congestion Management Plan trip reduction programs. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for opportunities for TDM. The project does not conflict with this policy. |
| Fort Ord Master Plan Land Use and Transportation Policy A.1: Each jurisdiction with lands at former Fort Ord shall coordinate land use and transportation planning both internally and with adjacent jurisdictions consistent with the Reuse Plan circulation framework.<br>Program A-1.1: Each jurisdiction shall support development of a travel demand model covering lands at former Fort Ord | Consistent. Opportunity Sites 31 and 47 are within the Fort Ord Master Plan area and already served by the existing roadway network, and would not modify the overarching circulation framework. The project used AMBAG RTDM for VMT analysis, calibrating and modifying to accommodate the project-specific conditions, which helped evaluate the |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| to help evaluate the relationship between land use and transportation system.<br>Program A-1.2: Each jurisdiction with lands at former Fort Ord shall require new developments to conduct a traffic analysis to determine impacts on traffic conditions and require measures, such as TDM programs and traffic impact fees, to mitigate these impacts. | relationship between land use and transportation system, and satisfying the intent of regional modeling coordination.<br>AMBAG maintains the RTDM in coordination with the cities and counties, including the County of Monterey. As part of the Metropolitan Transportation Plan/Metropolitan Transportation Improvement Program, AMBAG incorporates all approved projects into the RTDM and keep land use and transportation facility data current. Future development on these sites will be subject to project-level, non-CEQA LOS traffic assessment under local regulations to evaluate localized traffic conditions and identify necessary roadway improvements. Future projects will also be required to implement TDM programs and pay applicable traffic impact fees. Project-level VMT reduction TDMs are separately addressed under Section 4.16.5.2 (Threshold 2). The project does not conflict with this policy. |
| Fort Ord Master Plan Land Use and Transportation Policy A.2: The transportation system to serve former Fort Ord lands shall be designed to reflect the needs of surrounding land uses, proposed densities of development, and shall include streets, pedestrian access, bikeways and landscaping as appropriate. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any required active transportation facilities. The project does not conflict with this policy. |
| Fort Ord Master Plan Air Quality Policy A-3: Integrate the land use strategies of the California Air Resources Board's publication, "The Land Use Air Quality Linkage: How Land Use and Transportation Affect Air Quality," into local land use decisions. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to minimize impacts on VMT and air quality. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. The project does not conflict with this policy. |
| Fort Ord Master Plan Air Quality Program A.3-1: The County shall plan and zone properties, as well as review development proposals to promote the Land Use-Air Quality linkage. This linkage includes, but is not limited to, enhancement of Central Business Districts, compact development patterns, residential densities that average above seven dwelling units per acre, clustered employment densities and activity centers, mixed use development, and integrated street patterns. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to minimize impacts on VMT and air quality. The resulting opportunity sites were sited based on these principles and the constraints as described in the HEU6. Additionally, the Fort Ord Master Plan designated properties for development or development with restrictions. The opportunity sites located in this planning area are consistent with development envisioned in the Master Plan. Additionally, as development is proposed the County will review the applications for consistency with this policy including integrated street patterns. The project does not conflict with this policy. |
| Fort Ord Master Plan Program A-3.2: The County shall zone high density residential and employment land uses to be clustered in and near activity centers to maximize the efficient use of mass transit. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to maximize the use of transit. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. Additionally, the HEU6 includes Implementation Program H-1.C, Energy Efficiency and Conservation for Goal H-1 which includes promoting transit- |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| | oriented, including active transportation, and mixed-use development in Community Areas and Rural Centers near activity centers and transit routes to minimize vehicle trips and transportation energy consumption. Program H-2.G, Comprehensive Suite of Incentives/Concessions for Developers, also include providing TOD of affordable housing near transit hubs. The project does not conflict with this policy. |
| Fort Ord Master Plan Residential Land Use Policy E-1: The County of Monterey shall make land use decisions that support transportation alternatives to the automobile and encourage mixed-use projects and the highest-density residential projects along major transit and public transportation routes. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to maximize the use of transit. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. Additionally, the HEU6 includes Implementation Program H-1.C, Energy Efficiency and Conservation for Goal H-1 which includes promoting transit-oriented, including active transportation, and mixed-use development in Community Areas and Rural Centers near activity centers and transit routes to minimize vehicle trips and transportation energy consumption. Program H-2.G, Comprehensive Suite of Incentives/Concessions for Developers, also include providing transit-oriented development (TOD). The project does not conflict with this policy. |
| Fort Ord Master Plan Residential Land Use Policy E-3: In areas of residential development, the County of Monterey shall provide for designation of access routes, street and road rights-of-way, off-street and on-street parking, bike paths, and pedestrian walkways.<br>Program E-3.1: The County of Monterey shall delineate adequate circulation rights-of-way to and within each residential area by creating circulation rights-of-way plan lines.<br>Program E-3.2: The County of Monterey shall prepare pedestrian and bikeway plans and link residential areas to commercial development and public transit. | Consistent. The County has ongoing planning activities to provide improved active transportation connectivity including coordination with TAMC and Caltrans ATP planning processes. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including roadway design and multimodal circulation and access. The Master Plan envisioned development to be comprehensively planned alongside transportation infrastructure. The project does not conflict with this policy. |
| **Greater Monterey Peninsula Area Plan** | Opportunity Sites 40, 45, 46, 52 (Opportunity Site 53 is located within City of Marina city limits). |
| GMP-2.4: To minimize traffic safety hazards, creation of new direct access points from single-family residences onto Highway 68 or Laureles Grade shall be prohibited, unless there is no other feasible access. | Consistent: The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including not creating new direct access points from single-family residences onto Highway 68 or Laureles Grade, unless there is no other feasible access. Opportunity Site 52 is the only site that abuts Highway 68. Access to the site is anticipated to be via Olmstead Road with the potential for an alternative access point for emergency access only. The proposed project does not conflict with this policy. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
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| **G**MP-2.8: Development directly beneath runway approaches of the Monterey Peninsula Airport and Marina Municipal Airport shall:<br>a. be of low intensity,<br>b. not generate electrical interference to radio communication between pilots and the air traffic control tower,<br>c. not contain sources of glare which would blind or confuse pilots, and<br>d. be required to grant aviation easements to the Monterey Peninsula Airport District or other appropriate entity as a condition of development approval. | Consistent: Refer to analysis in C-7.1 and C-7.2 for additional information. The proposed project would not conflict with this policy. |
| **Greater Salinas Area Plan** | Opportunity Sites 1, 2, 3, 4, 5, 6 |
| GS-2.2: The County shall work with the City of Salinas to design a bypass roadway that provides an alternative route of traffic from SR-101 to Reservation Road along the west side of the City of Salinas (a.k.a. West Side Bypass) and also preserves as much agricultural land west of the City of Salinas as possible. | Consistent. The proposed project would not impede the County's ability to work with the City of Salinas to design a bypass roadway that provides an alternative route of traffic from U.S. Route 101 to Reservation Road. The proposed project would not conflict with this policy. |
| GS-2.3: The SR-101 bypass shall be designated a scenic highway. The bypass design shall incorporate sound deflection berms with appropriate landscaping and such measures shall be held consistent with its "scenic highway" designation. | Consistent. The proposed project would not prevent or obstruct with the County's plan to designate the U.S. Route 101 bypass as a scenic highway. The proposed project would not conflict with this policy. |
| **Toro Area Plan** | Opportunity Site 24 |
| T-2.3 Continue to work with the state, local agencies, and citizens groups to alleviate traffic congestion while maintaining the scenic beauty of Highway 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following measures:<br>a. coordination with Caltrans and TAMC for the construction of a four-lane facility between the Toro interchange and State Route 218; and<br>b. construction of bus stops, pull-outs, and shelters where needed. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable. The project is a policy plan that would allow future development, and coordination with Caltrans and TAMC for improving Highway 68 is not part of the project. Opportunity Site 24 is within the Toro Area Plan, and although it is within proximity, it does not abut Highway 68, and construction of bus stops, pull-outs, and shelters along Highway 68 would not be required. The proposed project would not conflict with this policy. |
| T-2.5 Fair-share financial contributions from each new development in the Toro Planning Area shall be required to expedite funding and construction of Highway 68 improvements. | Consistent. The proposed project would be subject to fair-share financial contribution during individual project application process. The proposed project would not conflict with this policy. |
| T-3.1 Within areas designated as "visually sensitive" on the Toro Scenic Highway Corridors and Visual Sensitivity Map (Figure 16), landscaping or new development may be permitted if the development is located and designed (building design, exterior lighting, and siting) in such a manner that will enhance the scenic value of the area. Architectural design consistent with the rural nature of the plan area shall be encouraged. | Consistent. The only opportunity site in the Toro Area Plan is Opportunity Site 24. This site is not designated as "visually sensitive" on the Toro Scenic Highway Corridors and Visual Sensitivity Map (Figure 16). The proposed project would not conflict with this policy. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
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| **North County Land Use Plan (Coastal)** | Opportunity Site 48 |
| General Policy 3.1.2 (5). The major arterial roads in North County should be upgraded as necessary to serve the planned growth of North County. Other local, rural roads should be upgraded only as necessary to serve local traffic and not through-traffic demand. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable, which may include upgrading major arterial roads and other local roads. The proposed project would not impede the County's ability to upgrade County roadways. The proposed project would not conflict with this policy. |
| **6.** New development in rural areas should be located in areas with sufficient road capacity to accommodate additional transportation demand. Where necessary, the capacities of roads and public transit systems should be expanded to serve the transportation demand of areas specifically planned for concentrated development. In areas with highly congested traffic conditions, coastal-dependent development generating low volumes of traffic shall be preferred. | Opportunity Site 48 is the only site within the North County (Coastal) Land Use Plan (LUP) and this site is fronted by Hall Road to the south and Sill Road to the north. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable, to provide sufficient road capacity. There is also a bus stop less than 0.25 mile from the opportunity site. Therefore, the proposed project would not conflict with this policy. |
| **Carmel Area Land Use Plan** | Opportunity Sites 16 and 43 |
| 3.1.3 SR-1 and Transportation Policies<br>1. To conform to the Coastal Act, most remaining highway capacity should be reserved for coastal priority uses: recreation and visitor-serving facilities, agriculture, and coastal-dependent industry. Commitment to further residential development through subdivision should be extremely limited. Traffic shall be monitored in order to provide a basis for decision-making. | Consistent. Opportunity Site 16 in the Carmel Area LUP is adjacent to SR-1 and proposes HDR/30 zoning with a maximum of 30 units per acre. The policy states that commitment to further residential development through subdivision should be extremely limited, however, the project does not inherently conflict with the Coastal Act's highway capacity policy at this programmatic level. The existing land use is medium density residential and the site is currently developed with an abandoned convalescent home. The project is a policy plan and does not actively propose a subdivision and would not displace any coastal priority uses. Therefore, the proposed project would not conflict with this policy. |
| 3.1.3 SR-1 and Transportation Policies<br>7. The number of private roads and recreational access road entrances off SR-1 should be limited whenever possible for traffic safety and management purposes. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including limiting access via SR-1 for safety and management purposes. The proposed project does not conflict with this policy. |
| 3.1.3 SR-1 and Transportation Policies<br>9. Major development projects – both residential and recreation and visitor-serving, including significant expansion of existing facilities – should be required to contribute their "fair-share" toward improvements of SR-1 required as a result of traffic generated by the particular project. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including contributing their fair-share toward improvements of SR-1. The proposed project does not conflict with this policy. |

**Table 4.16-1. Monterey County General Plan and Land Use Plan Consistency Analysis**

| Policy | Analysis |
|---|---|
| **Castroville Community Plan**[7] | Opportunity Sites 11, 12, 13, 14 15, 30, 41 |
| Goal 3: Promote the redevelopment of the downtown area to create pedestrian friendly, mixed-use areas that positively contribute to the community's character and sense of place.<br>Policy 3.3 – Pedestrian and bicycle connections shall be created between the downtown, Castro Plaza, slough enhancement areas, the Commuter Train Station Area, the high school, and other portions of the community to promote linkages and improve the pedestrian and bicycle accessibility of the community. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including providing pedestrian and bicycle connections where needed and required to promote linkages and improve the pedestrian and bicycle accessibility of the community. The proposed project does not conflict with this policy. |
| Goal 8: Provide safe and convenient access to the new train station for the existing community and commuters.<br>Policy 8.1: The Community Plan circulation improvement program shall be implemented, including installing an intersection improvement project on SR-156 and realigning Castroville Boulevard.<br>Policy 8.2: Roadways in the existing community shall be extended to provide access to the train station and include drop off facilities.<br>Policy 8.3: A safe and attractive pedestrian/bike underpass under the railroad tracks to connect the train platform to the parking facilities on the east side shall be provided. | Consistent. As development is proposed County staff will review the application for consistency with access and transportation regulations and standards. Each development project in Castroville is required to contribute to applicable regional and local development impact fees program to provide safe and convenient access for the community, which may include the listed improvements in these policies related to Goal 8 or other similar improvements. The Caltrans Hwy 156/Castroville Boulevard interchange improvements have been approved. The train station is in the coastal one and the Castroville Community Plan is not certified by the Coastal Commission. The County is in the process of updating the Community Plan including amending circulation policies. As such, the proposed project does not conflict with this policy. |
| Goal 9: Create a safe and convenient pedestrian and bicycle system that connects local and regional destinations.<br>Policy 9.1: Safe pedestrian and bicycle crossings shall be provided at major roadways and the railroad facilities.<br>Policy 9.2: Traffic calming measures shall be implemented to create a safe, pedestrian friendly downtown area.<br>Policy 9.3: Adequate signage shall be provided to direct regional bicycle travelers through the community to connect with the various regional bicycle trails.<br>Policy 9.4: The Artichoke Avenue improvement project that will include a bicycle and pedestrian trail along the proposed Tembladero Slough shall be implemented.<br>Policy 9.5: A safe and attractive railroad underpass that connects to pedestrian and bike facilities connecting to North Monterey High School and the Moro Cojo housing development and other community facilities planned for the area east of Castroville Boulevard shall be provided.<br>Policy 9.6: Pedestrian/bike facilities shall be encouraged in required agricultural buffer areas and along slough enhancement areas. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including providing safe and convenient pedestrian and bicycle system that connects local and regional destinations. As Policy 9.4 is related to a portion of the Castroville Community Plan that is located in the Coastal Zone, Artichoke Avenue improvements will not be moving forward as the Coastal Commission has not certified that portion of the Community Plan. The proposed project does not conflict with this policy. |

[7] The Castroville Community Plan area is located within the North County Area Plan (Inland), which includes Opportunity Sites 8 through 15, 30, 39, 41, 44, 49, 50, 51, and 64. The North County Area Plan (Inland) contains no policies related to transit, roadway, bicycle, or pedestrian facilities, except congestion-related policies that are no longer used for CEQA analysis.

**Notes:** ATP = Monterey County Active Transportation Plan; RHNA = Regional Housing Needs Assessment; TAMC = Transportation Agency of Monterey County; TDM = Transportation Demand Measures

### *Conclusion*

As discussed above, there are plans and policies in place within UMC that encourage transit usage and the construction of safe and user-friendly active transportation facilities. These plans and policies encourage the development of a balanced transportation system that includes safe and convenient multimodal travel.

The VMT Memo (Appendix L) provides an accessibility assessment for the opportunity sites based on their proximity to transit facilities, bikeway and pedestrian facilities. This evaluation created 0.5-mile buffer zones using transit stop data obtained from MST and bicycle facility data provided by the TAMC. Because there is no known source of comprehensive data on pedestrian facilities, these were not mapped. The resulting buffer zones were then overlaid unto the opportunity sites. Figure 4.16-3, North County Transit Network with Buffer, and Figure 4.16-4, South County Transit Network with Buffer, provide a map of the transit overlay analysis. Based on the overlay analysis, 51 of the 56 opportunity sites are within 0.5 mile of existing transit stops. Figures 4.16-1 and 4.16-2 provide maps of the bicycle overlay analysis. Based on this analysis, 53 of the 56 opportunity sites are located within 0.5 mile of existing or proposed bicycle facilities. The project aligns with the regional VMT reduction and TOD strategies by facilitating development within 0.5 mile of transit stops and bicycle facilities.

Developments that occur under the HEU6 are expected to be reviewed during the application review and site plan review to provide bicycle and pedestrian access that ensures high connectivity with existing and planned bicycle and pedestrian facilities to ensure consistency with the adopted General Plan roadway classifications and the TAMC ATP. This includes the implementation of sidewalks, crosswalks, and other pedestrian-friendly infrastructure that links residential areas with activity centers, transit and other residential areas. The overlay analyses and the assessment of the project demonstrate alignment with the County's goals and policies for pedestrian connectivity. Additionally, while no longer used for CEQA analysis, it is acknowledged that individual development could result in traffic congestion impacts measured in LOS and ADT, triggering traffic improvements such as signal warrants, round-abouts, acceleration/deceleration lanes (turn-pockets), etc. Future development projects are required to pay local and regional traffic fees and/or provide the needed traffic improvements according to the existing regulatory requirements.

As outlined above under state, regional, and local subheadings in this section, the project is not expected to result in any adverse effects on any existing circulation system by interfering with, degrading, or preventing the implementation of planned pedestrian, bicycle, or transit infrastructure. Development facilitated by the HEU6 would not place development in the path of or place of current or planned transportation projects to conflict with a program, plan, ordinance or policy addressing the circulation system.

The assessment of buffer zones around transit stops aligns with the County's goals and policies, as well as the vision for the TAMC ATP. It ensures high connectivity and provides access and mobility, all while maintaining quality of life and promoting safe bicycle and pedestrian travel. Furthermore, it supports a balanced transportation system that encourages public transit use and meets the RTP goal for increasing affordability, accessibility, and safety. Therefore, the project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measure is required.

### Significance of Impact After Mitigation

Less than significant impact.

### 4.16.5.2 Threshold 2: Induction of Substantial Vehicle Miles Traveled.

**Threshold 2:** Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

### Impact Analysis

Table 4.16-2, Vehicle Miles Traveled by Scenario, summarizes VMT results compared to the significance thresholds as described in Section 4.16.4, Thresholds of Significance. The thresholds were calculated to be 14.3 VMT per capita for residential uses and 18.9 VMT per employee for employment using the 15 percent below baseline guideline. The 2031 No Project scenario resulted in a VMT per capita of 21.5 and VMT per employee of 30.4. The 2031 Plus Project scenario resulted in a VMT per capita of 20.9 and VMT per employee of 31.7. VMT per capita value is reduced by 0.6 VMT per capita between the 2031 No Project and 2031 Plus Project scenarios for residential uses. However, the VMT per employee value is increased by 1.3 VMT per employee between the 2031 No Project and 2031 Plus Project scenarios for employment uses. Notably, both 2031 scenarios—if No Project or With project—exceed the VMT thresholds. Therefore, impacts would be significant.

**Table 4.16-2. Vehicle Miles Traveled by Scenario**

| Jurisdiction | 2031 No Project | | 2031 Plus Project | |
|---|---|---|---|---|
| | VMT/Capita | VMT/Employee | VMT/Capita | VMT/Employee |
| **Thresholds** | **14.3** | **18.9** | **14.3** | **18.9** |
| Unincorporated County of Monterey | 21.5 | 30.4 | 20.9 | 31.7 |
| Percent of Threshold | 150.3% | 160.8% | 146.2% | 167.7% |
| **Over Threshold?** | **Yes** | **Yes** | **Yes** | **Yes** |
| ***Informational Purposes Only – VMT for a reasonable Scenario with 4,479 total units on opportunity sites and 1,484 units on pipeline sites)*** | | | | |
| **Unincorporated County of Monterey* | *21.6* | *30.5* | *21.3* | *30.7* |
| **Percent of Threshold* | *150.9%* | *161.4%* | *149.0%* | *162.0%* |

**Source:** Kimley-Horn 2026.

For informational purposes, an earlier VMT model result is included, which assumed development of up to 4,479 housing units on opportunity sites and 1,484 housing units on pipeline sites. This scenario closely approximates the current reasonable buildout scenario of 4,434 housing units on opportunity sites. The results of this earlier modeling effort are presented in Table 4.16-2. As shown in the table, the reasonable buildout scenario results in VMT per capita and VMT per employee values that are only marginally different from those under the theoretical maximum buildout scenario. Specifically, despite a difference of approximately 8,018 housing units in the unincorporated county, the VMT metrics change only slightly. The percentage of the significance threshold for VMT per capita changes from 146.9 percent to 149.0 percent, while the percentage of the threshold for VMT per employee changes from 168.2 percent to 162.0 percent. These results demonstrate that even a substantial reduction in assumed housing development does not meaningfully affect the Countywide VMT per capita or VMT per employee metrics. Furthermore, it demonstrated that the scenario with fewer housing units results in a slight increase in VMT per capita and a slight decrease in VMT per employee. Overall, these differences are minimal and do not affect the impact conclusion.

The project includes the development of a multitude of sites throughout UMC and one opportunity site within the City of Marina. Due to the general nature of the project and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that will reduce VMT for specific projects as part of this analysis. Therefore, the findings in Table 4.16-2 are a worst-case scenario.

The significant VMT impacts identified in Table 4.16-2 reflect the VMT for implementation of the entire project. Individual sites included in the project may or may not exceed the threshold of significance in project level and they may include site-specific elements or mitigation measures that reduce VMT to below the threshold of significance.

There are a multitude of VMT-reducing design principles, policies, and improvements that are further described in this section which may ultimately mitigate or potentially reduce the VMT impacts outlined in this evaluation in the future. However, the potential VMT-reducing approaches cited in this section require further planning and development, as well as committed funding sources including those from participants in the development community (many of which may not be identified yet as large areas of land may be further subdivided into specific projects and development). These strategies remain vital when interpreting the outcomes of this VMT assessment, and where relevant, they should be incorporated in future VMT evaluations within UMC.

### *Vehicle Miles Traveled-Reducing Design Principles*

Project design features that reduce VMT can potentially lower the overall VMT of the project. Considerations include:

- Compactness of design and TOD
- Providing a range of housing options
- Incorporation of a mix of uses
- Walkable and bikeable community design
- A variety of mobility and access options

Since the AMBAG RTDM does not inherently account for the effects of many of these design principles, and the specific characteristics, locations, and timelines of these VMT-reducing strategies are uncertain, their additional impacts will need to be assessed at the individual project level. These factors will play a significant role in analyzing individual development projects, with the extent of their influence depending on the selected location and design features.

### *Vehicle Miles Traveled-Reducing Policies and Improvements*

The following approaches and programs provide opportunities for VMT mitigation:

- Transportation Demand Measures
- 2045 RTP and the SCS
- VMT-Reducing Design Principles

### *Transportation Demand Measures*

VMT mitigation typically depends significantly on TDM measures. Generally, these measures encompass two primary strategies: policy-based strategies and infrastructure-related strategies. The California Air Pollution Control Officers Association (CAPCOA) guide for Quantifying Greenhouse Gas Mitigation Measures is one of the primary bases for estimating mitigation effects in California. The most recent version of CAPCOA's Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (Handbook) published in January 2022 was reviewed to identify most applicable measures for the

project (CAPCOA 2022). The Handbook provides methodologies and assumptions for estimating the effectiveness of various TDM measures, including associated ranges of VMT reduction (ranges vary from 0 to 30 precent identified in each TDM measure). The percent reduction is capped at 30 percent. The purpose for the 30 percent cap is to limit the influence of any single built environmental factor (such as density). Projects that implement multiple land use strategies (e.g., density, design, diversity) will show more of a reduction than relying on improvements from a single built environment factor (CAPCOA 2024). The estimated reduction effectiveness varies by measure and project-specific conditions. The reduction values are derived using the greenhouse gas reduction methodologies and input variables identified in the CAPCOA Handbook. Detailed descriptions of the measures and associated calculation methodologies are available in the Handbook at: https://www.caleemod.com/documents/handbook/full_handbook.pdf. It should be noted that these measures cannot be used in the absolute aggregate to reduce VMT impacts. While certain measures can be applied to specific projects, many are more effective when used systematically. TDM measures include:

- **Integrate Affordable and Below-Market-Rate Housing (T-4):** This measure requires below-market-rate (BMR) housing. BMR housing provides greater opportunity for lower-income families to live closer to job centers and achieve a jobs/housing match near transit. It is also an important strategy to address the limited availability of affordable housing that might force residents to live far away from jobs or school, requiring longer commutes. The quantification method for this measure accounts for VMT reductions achieved for multi-family residential projects that are deed-restricted or otherwise permanently dedicated as affordable housing. Multi-family residential units must be permanently dedicated as affordable for lower-income families. Lower-income is defined as 80 percent of area median income or below, and affordable housing as costing 30 percent of gross household income or less. This can decrease up to 28.6 percent of GHG emissions from project/site multi-family residential VMT.
- **Provide Ridesharing Program (T-8):** This measure would implement a ridesharing program and establish a permanent transportation management association with funding requirements for employers. Ridesharing encourages carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips, VMT, and GHG emissions. This can decrease VMT by up to 8.0 percent of GHG emissions from project/site employee commute VMT.
- **Implement Subsidized or Discounted Transit Program (T-9):** This measure provides subsidized, discounted, or free transit passes for employees and/or residents. This can decrease VMT by up to 5.5 percent. To achieve the higher end of this reduction the project should be accessible either within 1 mile of high-quality transit service (rail or bus with headways of less than 15 minutes), 0.5 mile of local or less frequent transit service, or along a designated shuttle route providing last-mile connections to rail service.

- **Provide Electric Vehicle Charging Infrastructure (T-14).** Install on-site electric vehicle chargers in an amount beyond what is required by the California Green Building Standards (CALGreen) at buildings with designated parking areas (e.g., commercial, educational, retail, multi-family). This can decrease VMT by up to 11.9 percent from vehicles accessing the commercial or multi-family housing building.
- **Limit Residential Parking Supply (T-15).** This measure will reduce the total parking supply available at a residential project or site. Limiting the amount of parking available creates scarcity and adds additional time and inconvenience to trips made by private auto, thus disincentivizing driving as a mode of travel. This can decrease VMT by up to 13.7 percent of GHG emissions from resident vehicles accessing the site.
- **Unbundle Residential Parking Costs from Property Cost (T-16):** This measure unbundles, or separates, a residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost. On the assumption that parking costs are passed through to the vehicle owners/drivers using the parking spaces, this measure results in decreased vehicle ownership and, therefore, a reduction in VMT. This can decrease VMT by up to 15.7 percent. This measure should be practiced in areas where there is robust access to transit, bicycle and pedestrian facilities to facilitate utilization of alternative modes of transportation.
- **Improve Street Connectivity (T-17):** This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of vehicle intersections compared to the average intersection density in the United States. Increased vehicle intersection density is a proxy for street connectivity improvements, which help to facilitate a greater number of shorter trips and thus a reduction in GHG emissions. This can decrease VMT by up to 30.0 percent of GHG emissions from vehicle travel in the plan/community.
- **Provide Pedestrian Network Improvement (T-18):** This measure increases sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. Pedestrian improvements can reduce VMT up to 6.4 percent, particularly when new or improved sidewalks connect people to an existing network of pedestrian and transit facilities.
- **Construct or Improve Bike Facility (T-19-A):** This measure involves constructing or improving a single bicycle lane facility (limited to Class I, II, or IV) that connects to a larger existing bikeway network. Enhancing bicycle infrastructure can lead to a VMT reduction of 0.8 percent per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- **Construct or Improve Bike Boulevard (T-19-B):** This measure involves constructing or improving a single bicycle boulevard that connects to a larger existing bikeway network. Bicycle boulevard construction can lead to a VMT reduction of 0.2 percent per site. The effectiveness depends on the network's extent and its connectivity to key destinations.

- **Expand Bikeway Network (T-20):** This measure will increase the length of a city or community bikeway network. A bicycle network is an interconnected system of bike lanes, bike paths, bike routes, and cycle tracks. Enhancing a bicycle network can lead to a VMT reduction of 0.5 percent per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- **Implement Conventional Carshare Program (T-21-A):** This measure provides carshare access in the user's community by deploying conventional carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes. Implementing a carshare program can reduce VMT up to 0.15 percent.
- **Implement Electric Carshare Program (T-21-B):** This measure will increase carshare access in the user's community by deploying electric carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes. This can reduce up to 0.18 percent of GHG emissions from vehicle travel in the plan/community.
- **Implement Pedal (Non-Electric) Bike-Share Program (T-22-A):** This measure will establish a bike-share program. Bike-share programs provide users with on-demand access to bikes for short-term rentals. This measure can reduce VMT up to 0.02 percent of GHG emissions from vehicle travel in the plan/community.
- **Implement a Bike-Share Program (T-22-B):** This measure involves establishing a bike-share program, providing users with on-demand access to bikes for short-term rentals. Bike-share programs can reduce VMT by up to 0.06 percent in the plan area. These programs are typically more effective in dense urban areas where short trips by car are common.
- **Implement Scooter-Share Program(T-22-C):** Scooter-share programs provide users with on-demand access to electric scooters for short-term rentals. This program can reduce VMT by up to 0.07 percent in the plan area and are more effective in dense urban areas where short trips by car are common.
- **Provide Community-Based Travel Planning (T-23):** This measure will target residences in the plan/community with community-based travel planning. Community-based travel planning is a residential-based approach to outreach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single-occupancy vehicles, thereby reducing VMT. A community-based travel plan can reduce greenhouse gases up to 2.3 percent in a plan area depending on the number of residents targeted.
- **Implement Market Price Public Parking On Street (T-24):** This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers. Increasing the cost of parking increases the total cost of driving to a location, incentivizing shifts to other modes and thus decreasing total VMT to and from the priced areas, by up to 30.0 percent within the plan area.

- **Extend Transit Network Coverage or Hours (T-25):** This measure involves expanding the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project area. This can decrease VMT by up to 4.6 percent for a plan area, particularly in more urbanized areas with frequent and reliable transit service.
- **Increase Transit Service Frequency (T-26):** This measure would increase transit frequency on one or more transit lines serving the plan/community. It can reduce passenger VMT by up to 11.3 percent.
- **Implement Transit-Supportive Roadway Treatments (T-27):** This measure implements transit-supportive treatments on the transit routes serving the plan/community. Transit-supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability. It can reduce passenger VMT by up to 0.6 percent in areas with frequent service.
- **Provide Bus Rapid Transit (T-28):** This measure will convert an existing bus route to a bus rapid transit (BRT) system. BRT can increase the transit mode share in a community due to improved travel times, service frequencies, and the unique components of the BRT system. This mode shift may reduce VMT by up to 13.8 percent within the plan area.
- **Reduce Transit Fares (T-29):** This measure will reduce transit fares on the transit lines serving the plan/community. A reduction in transit fares creates incentives to shift travel to transit from single-occupancy vehicles and other traveling modes, which can reduce VMT up to 1.2 percent.
- **Provide Transit Shelters (T-46):** For this measure, a local government or transit agency provides amenities that make it safer and more comfortable to wait for the bus. The two interventions that have proven to lead to changes in rider perceptions are adding bus shelters and adding real-time arrival information. Research into transit ridership shows that adding these amenities decreases both the real and the perceived wait time for riders, which impacts riders' willingness to ride, decreasing up to 0.32 percent VMT within the plan area.
- **Infill Development (T-55):** This measure accounts for the VMT reduction achieved by infill housing development programs that allow residents to live closer to downtown areas where there is greater access to jobs and activities. Residents living at infill development projects typically do not need to travel as far to access essential destinations. This can reduce up to 30 percent of GHG emissions from project/site residential VMT.
- **Active Modes of Transportation for Youth (T-56):** This measure accounts for reductions in VMT achieved by projects that provide infrastructure to support any form of active transport among youth. Trips to school and extracurricular activities represent most of

the everyday travel taken by youth. Thus, ensuring that children can use active transportation whenever possible can serve to reduce up to 22.2 percent of school commute based VMT.

The above listed CAPCOA TDM measures are included for informational purposes only. The reduction in VMT resulting from implementing these measures can vary significantly based on local conditions, the extent of implementation, and how these strategies are integrated with other transportation and land use policies.

Additionally, County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80 – Voluntary Automobile Trip Reduction, require developers of all residential developments with 25 or more units to submit a Trip Reduction Checklist as part of the ministerial or discretionary permit review process. The checklist identifies proposed design elements and facilities that encourage alternative transportation usage and reduce VMT. However, pursuant to Cleveland National Forest Foundation v. San Diego Association of Governments (2017) 3 Cal.5th 497, mall-project screening is not valid unless there is substantial evidence in the administrative record demonstrates that the screening methodology is reasonably supported and that projects meeting the screening criteria would not result in significant VMT impacts. Therefore, a project-specific analysis would be required at the time of project application to determine whether the project could meet the VMT screening threshold of 15 percent below the regional average. Applicability and feasibility of various VMT-reducing measures would be evaluated at the time of development application in accordance with County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80, Voluntary Automobile Trip Reduction, and Mitigation Measure (MM-) TRA-OBJ-1, MM-TRA-OBJ-2, and MM-TRA-CONS-3. However, there is no guarantee that all individual projects facilitated by the HEU6 could individually reduce VMT to below threshold level, and VMT impacts would remain significant and unavoidable.

#### *2045 Metropolitan Transportation Plan and the Sustainable Communities Strategy*

The goals of the AMBAG MTP/SCS are listed in Section 4.16.1.3, 2045 Metropolitan Transportation Plan and the Sustainable Communities Strategy. To achieve these goals, the 2045 MTP/SCS considers various land use and transportation scenarios, which are weighed against a variety of performance measures and measured against the goals outlined above. To achieve the preferred scenario of the MTP/SCS, affordable housing and land use strategies are employed that address the persistent jobs-housing imbalance in the region. The HEU6 is one of many housing elements in the region planning for increased affordable housing to address this imbalance. Therefore, the project is considered consistent with MTP/SCS as it pertains to VMT impacts.

### Significance of Impact

Potentially significant impact.

## Mitigation Measures

MM-TRA-OBJ-1, MM-TRA-OBJ-2, and MM-TRA-CONS-3 require all future development projects under the Objective and Consistency Processes to perform a project-specific VMT analysis. Projects must demonstrate consistency with the threshold of 15 percent below the regional baseline and implement VMT reduction measures if that threshold is exceeded.

**MM-TRA-OBJ-1: Project-Specific Vehicle Miles Traveled (VMT) Analysis and Reduction Measures.** For development projects streamlined under the Objective Process, the project applicant shall, prior to project approval, demonstrate to the County of Monterey (County) that the project's VMT per capita is at least 15 percent below the existing regional average. This demonstration shall be consistent with the County accepted VMT methodology and significance thresholds in effect at the time of development application review.

If the County determines, based on substantial evidence in the administrative record, that the project's VMT exceeds 15 percent below existing regional average, the project applicant shall implement VMT reduction measures to the maximum extent feasible, based on the California Air Pollution Control Officers Association's (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and project Developers (Handbook), County Code, Sections 20.64.250 and 21.64.250, Chapter 12.80, and/or any subsequent guidance document. Applicable measures may include, but are not limited to:

- Construction of, or fair-share contributions toward, bicycle, sidewalks, pedestrian pathways, pedestrian crossings, traffic calming improvements, transit access, or other multimodal/active transportation improvements that directly serve the project or provide connections to existing or planned active transportation facilities, adjacent streets, transit facilities, schools, parks, commercial services, and other activity centers;
- Provide rideshare information, transit information, bicycle information, nearby licensed childcare facility information, and other travel reduction strategy educational materials to tenants/buyers as part of move-in materials;
- Affordable or below-market-rate housing that are deed-restricted or otherwise permanently dedicated as affordable housing;
- Participation in the California Statewide Vehicle Miles Traveled Mitigation Program established pursuant to Public Resources Code. Section 21080.44, including payment into the Transit-Oriented Development Implementation Fund, consistent with applicable program requirements and implementation procedures, when available.

The applicant shall submit substantial evidence to the County showing that all feasible mitigation included above, by County Code, and/or in the CAPCOA Handbook are included in the project. Prior to issuance of project approvals The County shall review the substantial evidence to determine that all items listed are feasible and effective and comply with this mitigation, County Code, and/or the CAPCOA Handbook.

**MM-TRA-OBJ-2: Active Transportation Improvements.** The County of Monterey shall coordinate with the Transportation Agency for Monterey County (TAMC) to identify bicycle, pedestrian, transit access, and other multimodal improvements identified in adopted transportation plans that would directly serve the County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update opportunity sites.

The County shall require construction of improvements, dedication of necessary easements or right-of-way, where a reasonable nexus and rough proportionality exist between a future residential development project and identified improvements.

**MM-TRA-CONS-3: Project-Specific Vehicle Miles Traveled (VMT) Analysis and Reduction Measures.** All residential development projects processed under the Consistency Process shall comply with all standards and requirements of MM-TRA-OBJ-1 and MM-TRA-OBJ-2.

## Significance of Impact After Mitigation Measures

All future projects streamlining under the Objective Process would be required to implement MM-TRA-OBJ-1 and MM-TRA-OBJ-2, which require project-specific analysis to compare against the regional average and incorporation of trip reduction strategies intended to reduce VMT through various measures to the maximum extent feasible, including participating in the California Statewide Vehicle Miles Traveled Mitigation Program established pursuant to Public Resources Code, Section 21080.44, when it becomes available, and coordinating with TAMC to identify and construct active transportation improvements in adopted transportation plans that would directly serve the HEU6 opportunity sites. All future projects streamlining under the Consistency Process would also be subject to the same mitigation measures to reduce trips. The related VMT reduction percentage would generally follow the VMT reduction target used by CAPCOA Handbook and the County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, Voluntary Automobile Trip Reduction, where effectiveness of these measures would vary depending on site-specific conditions and the characteristics of future development projects. Although the trip reduction measures listed in County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, are not worded identically to the TDM measures in the CAPCOA Handbook, their overall purpose and intent are consistent. In addition, County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, allows the County to add or substitute listed measures and to accept additional trip reduction techniques.

The reduction in VMT resulting from implementing these measures can vary significantly based on local conditions, the extent of implementation, and how these strategies are integrated with other transportation and land use policies. There are other trip reduction strategies listed in the Trip Reduction Checklist and the CAPCOA Handbook, such as providing financial resources for site amenities that reduce vehicle trips and park-and-ride facilities. However, because the HEU6 is a program-level planning document, the details necessary to ensure implementation of such measures are not currently known and without future project characteristics, ownership structures, property management arrangements, homeowners' associations, and operational commitments, the feasibility of such measures are unknown. As a result, the County cannot demonstrate at this time that these measures would be enforceable for all future development projects accommodated under the HEU6. Accordingly, only those measures that can reasonably be incorporated into site planning and design at the program level have been identified as feasible mitigation.

Compliance with County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, and implementation of MM-TRA-OBJ-1, MM-TRA-OBJ-2, and MM-TRA-CONS-3would reduce VMT impacts to the maximum extent feasible. However, substantial evidence does not support a conclusion that the identified mitigation measures would achieve VMT reductions sufficient to reduce impacts to a less than significant level for all future projects under the HEU6. Therefore, VMT impacts would remain significant and unavoidable.

#### 4.16.5.3 Threshold 3: Hazardous Design Features

**Threshold 3:** Would the project substantially increase hazards due to a geometric design feature or incompatible uses?

### Impact Analysis

The project could result in the modification of existing transportation facilities including the introduction of new site driveways and access points, and new roadway, bicycle, and pedestrian infrastructure improvements at the time of development application. The project does not include any actual development projects with site plan details to evaluate hazardous design features. However, as development is proposed, County staff will review the development application for consistency with access and transportation regulations and standards, including roadway design and multimodal circulation and access. The Roadway Design Standards and Standard Details providing engineering design standards are available through the County Public Works, Facilities and Parks Department. The County Public Works, Facilities and Parks Department, is responsible for the design and construction of all County-maintained public roads. The Public Works, Facilities and Parks Department also works with the County Housing and Community Development Department to review land development applications for compliance with applicable standards for private roads, driveways, and public roadway design and maintenance. As part of this review, the County Public Works, Facilities and Parks Department evaluates if adequate driveway and roadway widths, sidewalks and crosswalks

requirements, sight distance requirements, traffic signals, intersections, and modifications to existing intersections are provided. Each project is reviewed individually for potential safety issues related to design and incompatible uses, including but not limited to roadways adjacent to agricultural uses and trails that may need to share roadways with farm equipment, livestock, or horseback riders. And if issues are identified, project applicant is required to mitigate the impacts in accordance with Circulation Element Policy C-1.3, in addition to applicable North County Land Use Plan and Carmel Area Land Use Plan policies, as addressed under the above Threshold 1 discussion. Furthermore, projects in the UMC are subject to the California Fire Code and County Code, Chapter 18.09, Fire Code, and Chapter 18.56, Wildfire Protection Standards in State Responsibility Areas. These policies that implement the County Circulation Element and Safety Element will require adequate and unobstructed emergency access for fire department apparatus and personnel to buildings, structures, hazardous occupancies, or other premises. There are no inherent transportation safety issues related to design, and each project will be reviewed according to applicable design standards. Therefore, the project would be expected to result in a less than significant hazard impact.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

### 4.16.5.4 Threshold 4: Inadequate Emergency Access

**Threshold 4:** Would the project result in inadequate emergency access?

### Impact Analysis

The planning and design of new development resulting from the project would include considerations for road widths, intersections, and traffic flow to ensure that emergency vehicles can navigate efficiently as required by the County of Monterey Roads & Bridges Engineering Division, which implements the County's engineering standards for roadways and emergency access construction pursuant to Roadway Design Standards and Standard Details.

Additionally, projects in the UMC are subject to the California Fire Code and County Code, Chapter 18.09, Fire Code, and Chapter 18.56, Wildfire Protection Standards in State Responsibility Areas, related to emergency access and evacuation. The County Code implements the 2010 General Plan Circulation Element and Safety Element and policies in the 1982 General Plan that regulate safety for the Carmel Area Land Use Plan and North County Land Use Plan policies and

requires adequate and unobstructed emergency access for fire department apparatus and personnel to buildings, structures, hazardous occupancies, or other premises. For instance, County Code, Chapter 18.09, Fire Code, Section Q102, Roads, requires the roadway surface to be unobstructed access to conventional drive vehicles and fire apparatus and to be an all-weather surface design to support the improved load of fire apparatus. Similarly, Safety Element Policy S-4.10 requires the County to create road maintenance agreements for all new private subdivision roads, and Policies S-4.16 and S-4.19 of the Safety Element require new or reconstructed bridges and all gates on emergency access roadways to be constructed in accordance with Chapter 18.56 of the County Code and the California Fire Code, as amended. Compliance with all applicable state and local design standards and regulations would be required to be shown on development plans and permit applications for review and approval by County Housing and Community Development Building Services and, in state responsibility areas, the Director of the Board of Forestry and Fire Protection or their designee, including local fire districts. Local fire protection districts include Monterey County Regional Fire Protection District, Cypress Fire Protection District (FPD), Salinas Rural Fire District, North County FPD, Aromas Tri-County FPD, Pebble Beach Community Service District (contracts with CAL FIRE), Carmel Highlands FPD, Mid-Coast Fire Brigade, Big Sur Volunteer Fire Brigade, South County FPD, Greenfield FPD, Mission Soledad Rural FPD, and Gonzales Rural FPD. Therefore, adequate emergency access would be provided, and impacts would be less than significant.

Also refer to Section 4.19, Wildfire, for discussion of the project's potential for inadequate emergency response or evacuation. When evacuations are ordered, residents leave affected areas using existing road and highways, and some areas of UMC can have substantial roadway congestion from heavy vehicle traffic, including Carmel Valley Road, which is the primary egress route for residents in the Carmel Valley region, and SR-68. The increase of vehicle traffic along already congested roadways and highways in the UMC could exacerbate vehicle congestion during emergency evacuations, resulting in inadequate emergency access. However, as discussed in Section 4.19, Threshold 1: Monterey County is divided into seven evacuation regions or zones by the Emergency Operations Plan Transportation and Evacuation Annex that promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under the threat and the County Sheriff's Office and other emergency operations personnel are experienced in evacuating large numbers of people during emergency situations. The decision to evacuate or shelter-in-place is based on an analysis of the situation by public safety and emergency management officials based on the unique conditions of the specific incident, and the project would not create unnecessary barriers or obstacles to result in inadequate emergency access. Compliance with existing regulatory requirements related to emergency access and evacuation would ensure adequate emergency access is provided for new residential development associated with future development. Section 4.19 also incorporates mitigation measures to develop and disseminate

evacuation map packet and evacuation education materials to increase public awareness of evacuation procedures and tips for evacuation to help residents be prepared (MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4). Emergency response or evacuation plans impacts related to wildfire would be less than significant with mitigation incorporated.

Furthermore, as discussed in Section 4.14, Public Services, under the Fire Protection subheading, future development projects are required to demonstrate compliance with the California Fire Code and local regulations through fire authority plan review, and pay mandatory fire development impact fees (MM-PS-OBJ-1 and MM-PS-CONS-2), and these required review by the respective fire protection districts would ensure that adequate fire and emergency vehicle access are provided. The project would be required to comply with statutory fire safety codes, and pays applicable impact fees, and impacts related to emergency access would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation.

Less than significant impact.

## 4.16.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to transportation. As stated in Chapter 4, Environmental Analysis, the project is a long-term planning document that addresses regional population and housing needs through land use planning. The cumulative impacts analysis is based on projections that are incorporated into the regional ambient growth assumptions used in the Regional Traffic Demand Model. Therefore, its impacts are inherently cumulative.

### 4.16.6.1 Cumulative Threshold 1: Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities

In addition to the residential projects facilitated by the project, the AMBAG RTDM incorporates cumulative land use data for UMC, as well as the incorporated cities and counties throughout the AMBAG region. As part of the Metropolitan Transportation Plan/Metropolitan Transportation Improvement Program, AMBAG updates the RTDM to incorporate approved development projects and maintain current land use and transportation network data. Accordingly, the model accounts for cumulative growth, including residential development in surrounding cities and a range of non-residential land uses, such as commercial, industrial,

office, institutional, and recreational uses throughout Monterey County and the broader AMBAG region. The cumulative traffic conditions associated with existing and reasonably foreseeable development in the UMC and throughout the AMBAG region are coded in the RTDM and reflected in the ambient growth assumptions used in this analysis. As individual developments are proposed, each application will be reviewed for consistency with applicable plans and regulations and will be required to provide or contribute to the circulation system needed to serve the project, including transit, roadway, bicycle and pedestrian facilities, as appropriate.

Thus, the analysis of future traffic conditions are considered cumulative impacts of the project. As discussed in Section 4.16.5.1, the project would not result in significant impacts on performance and safety of the circulation system. While no longer used for CEQA analysis, individual development could result in traffic congestion impacts as often measured in LOS and ADT, triggering traffic improvements such as signal warrants, round-abouts, acceleration/deceleration lanes (turn-pockets), etc. Future development projects are required to pay local and regional traffic fees and/or provide the needed traffic improvements according to the existing regulatory requirements. As with the project, cumulative projects would also be assessed for consistency with adopted policies, plans, or programs regarding public transit, bicycle, and pedestrian facilities and payment into applicable local and regional traffic impact fees are required to ensure that impacts are less than significant. The project would not result in either project-specific significant or cumulatively considerable impacts. No mitigation measures would be required.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.16.6.2 Cumulative Threshold 2: Conflict or Be Inconsistent with CEQA Guidelines, Section 15064.3, Subdivision (b)

Cumulative traffic impacts consider the impacts of future growth and development in the UMC and its vicinity on the roadway system serving the area. Because the projections for the project include all anticipated housing and employment growth in the UMC through 2031, the analysis of the project's environmental impacts is largely a cumulative impact analysis by nature.

To evaluate the cumulative effect of the project on the region, the VMT compared the 2031 No Project condition to the 2031 Plus Project condition using the AMBAG RTDM travel demand forecasting model, as recalibrated. The AMBAG RTDM includes the cumulative project land use

data for UMC. As discussed in Section 4.16.5.2, even without the project, VMT per capita and per employee would significantly exceed the 15 percent below baseline threshold. Although the project slightly reduces residential VMT compared to No Project conditions, both residential and employment VMT remain above CEQA thresholds. Therefore, the project and cumulative projects, when added to other regional growth, would contribute to a cumulative regional transportation pattern that does not meet VMT reduction targets. Although the project is projected to support future VMT-reducing strategies through compliance with County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, and implementation of MM-TRA-Tier 1-A and other cumulative projects would also be required to implement applicable VMT reduction measures (e.g., transit access, TDM programs), they would continue to incrementally contribute to regionally elevated VMT that exceeds regional standards, and the long-range cumulative effect would remain significant and avoidable. Cumulative projects would include wider variety of land uses other than residential development, which could also require more VMT reduction measures, especially when employers are involved. Under cumulative condition, additional regional implementation mechanisms or funding that is outside the County's control would be required. The project's contribution to cumulative VMT impacts is considered cumulatively considerable, therefore, impacts would be significant and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-TRA-OBJ-1, MM-TRA-OBJ-2, and MM-TRA-CONS-3.

### Significance of Impact After Mitigation Measures

Significant and unavoidable impact.

#### 4.16.6.3 Cumulative Threshold 3: Substantially Increase Hazards Due to a Geometric Design Feature or Incompatible Uses

The project itself does not propose specific developments but provides policies and programs to facilitate development of new housing units and preserve existing housing for all economic segments of the community. As discussed under Section 4.16.5.3, future individual projects would be subject to the development application process, which would be reviewed and approved by the County Public Works, Facilities and Parks, where they work with the County Housing and Community Development Department to review land development applications for compliance with applicable standards for private roads, driveways, and public roadway design and maintenance. Any cumulative increase in traffic from the project and other development would not, in and of itself, introduce geometric hazards unless a project fails to meet these established engineering standards.

Given that cumulative development, including buildout under the HEU6, would be subject to standard review and compliance with safety regulations and reviewed and approved by individual application process, the project would not contribute to a cumulatively considerable increase in transportation hazards. Impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation.

Less than significant impact.

#### 4.16.6.4 Cumulative Threshold 4: Result in Inadequate Emergency Access

Cumulative impacts on emergency access could occur if the project, in combination with other cumulative projects, result in inadequate emergency access in Monterey County. The HEU6 facilitates future housing across multiple sites that are served by existing roadways and are located near other developed areas with existing infrastructure. Each future development would undergo review for emergency access by County staff during the individual development review process, consistent with standards of the County and appropriate fire districts having authority. As discussed in Section 4.16.5.4, future development facilitated by the project would be required to comply with state, County, and appropriate fire districts having authority requirements for adequate emergency access, and it is reasonable to assume that cumulative projects would be subject to the same or similar standards. The project does not propose changes to existing emergency access routes and would not interfere with regional emergency response infrastructure. Other regional development projects would also be subject to review to ensure adequate emergency access is maintained. As also noted in Section 4.16.5.1, compliance with existing regulatory requirements related to emergency access and evacuation would ensure adequate emergency access is provided for new residential development, and it is reasonable to assume that that cumulative projects would be subject to the same or similar standards.

Because the project does not introduce design elements or circulation patterns that would conflict with emergency access, and because future development would be subject to site-specific access review, the project would not result in a cumulatively considerable contribution to emergency access constraints. Impacts would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

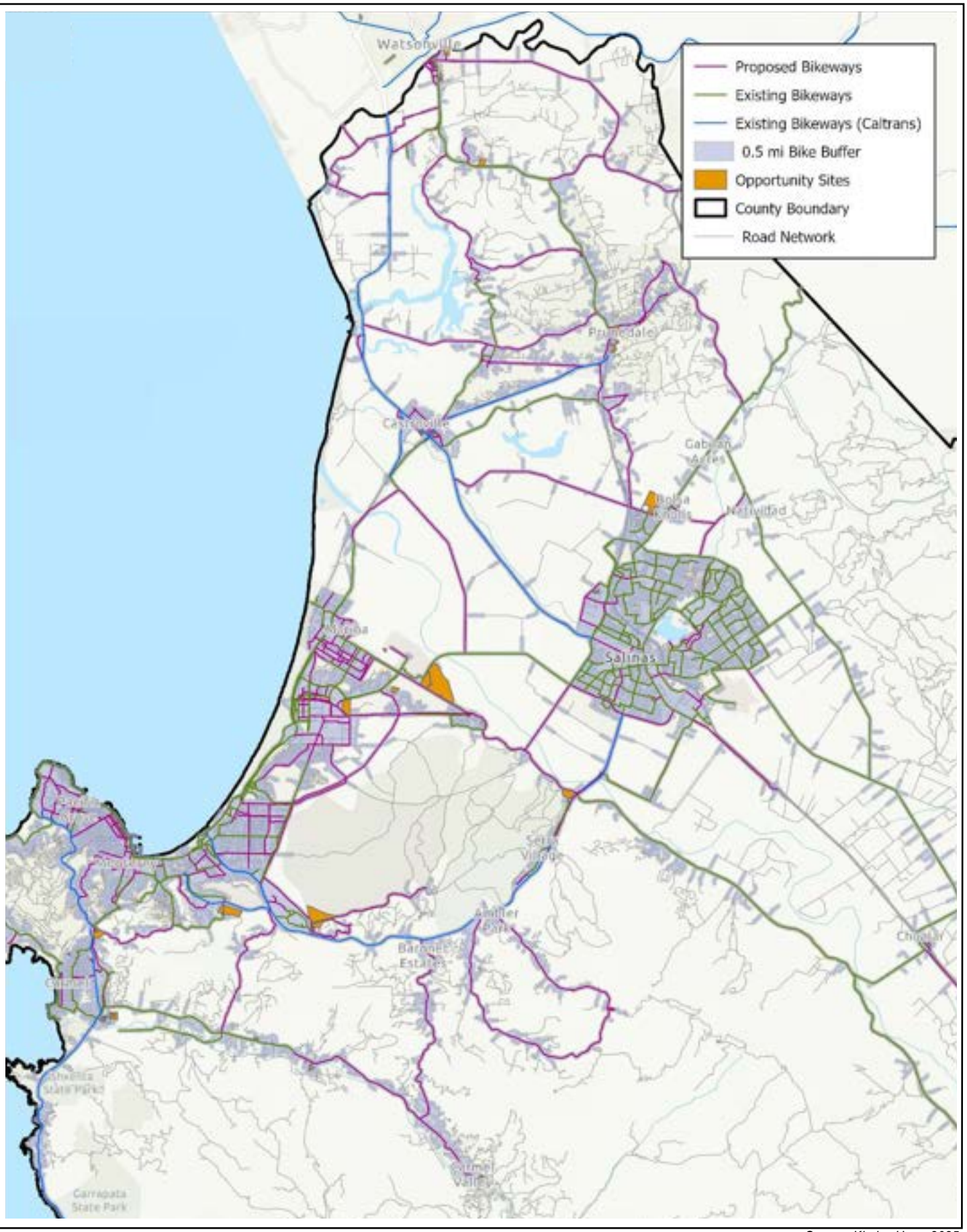
No mitigation measures are required.

### Significance of Impact After Mitigation.

Less than significant impact.

## 4.16.7 Conclusion

The project would have less than significant impacts without mitigation as it would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The project would exceed the VMT thresholds, and even with implementation of compliance with County Code, Sections 20.64.250 and 21.64.250, and Chapter 12.80.050, and MM-TRA-Tier 1-A, impacts would remain significant and unavoidable. The project would not substantially increase hazards due to a geometric design feature or incompatible uses, or result in inadequate emergency access, therefore, impacts related to these issues would be less than significant.




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*Source: Kimley Horn, 2025.*

Harris & Associates

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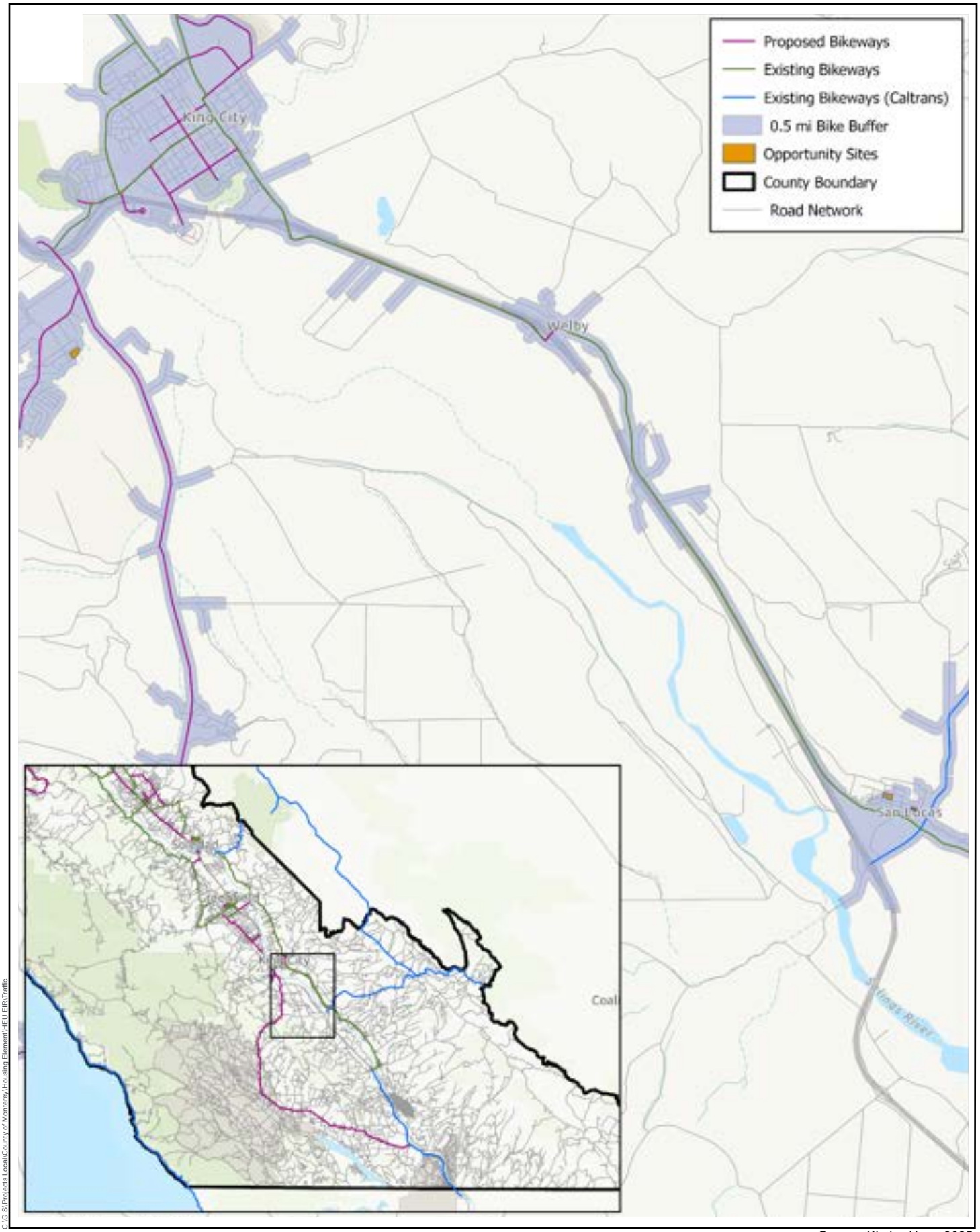
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**Figure 4.16-1**

North County Bike Network with Buffer

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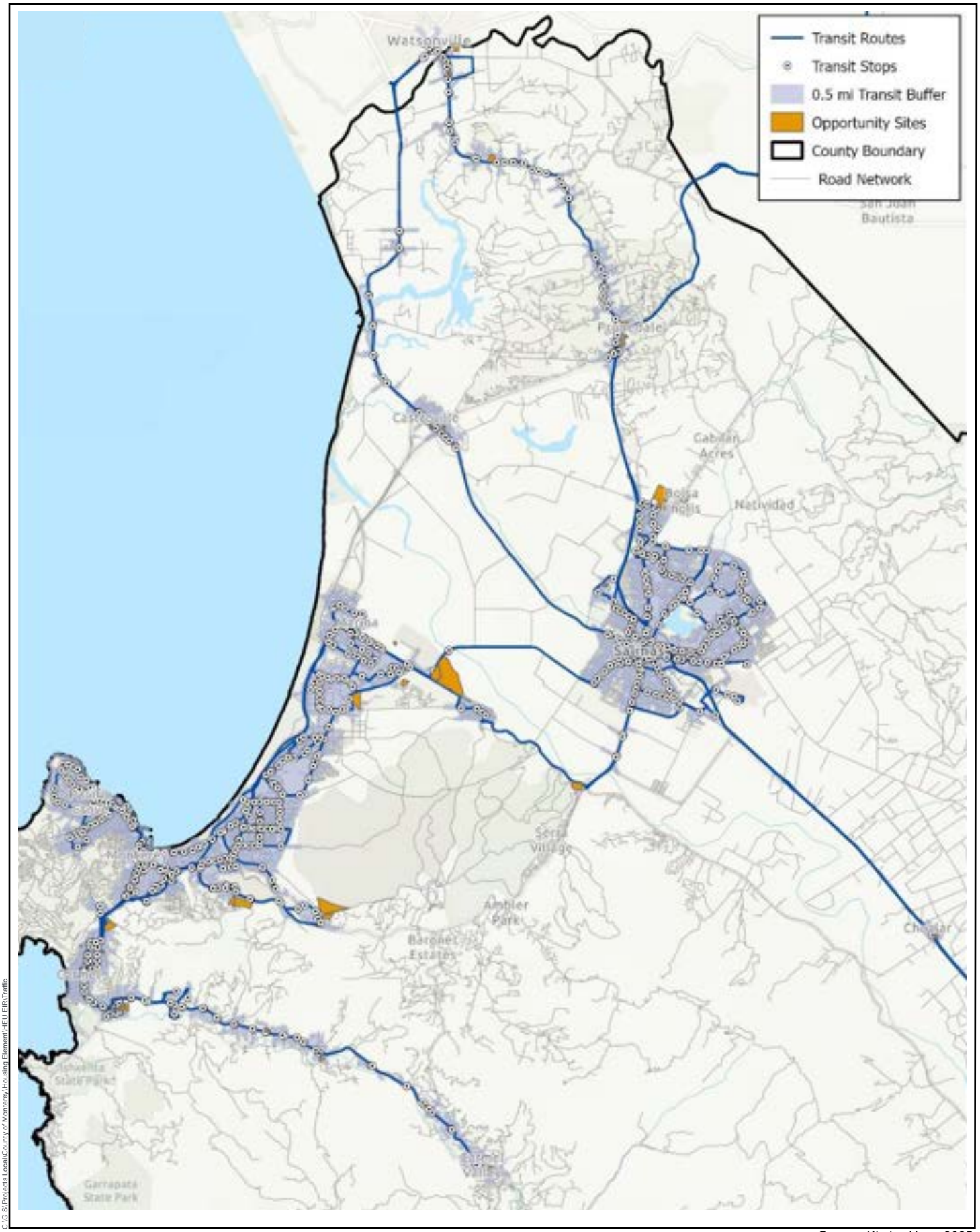
*Source: Kimley Horn, 2025.*

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**Figure 4.16-2**

South County Bike Network with Buffer

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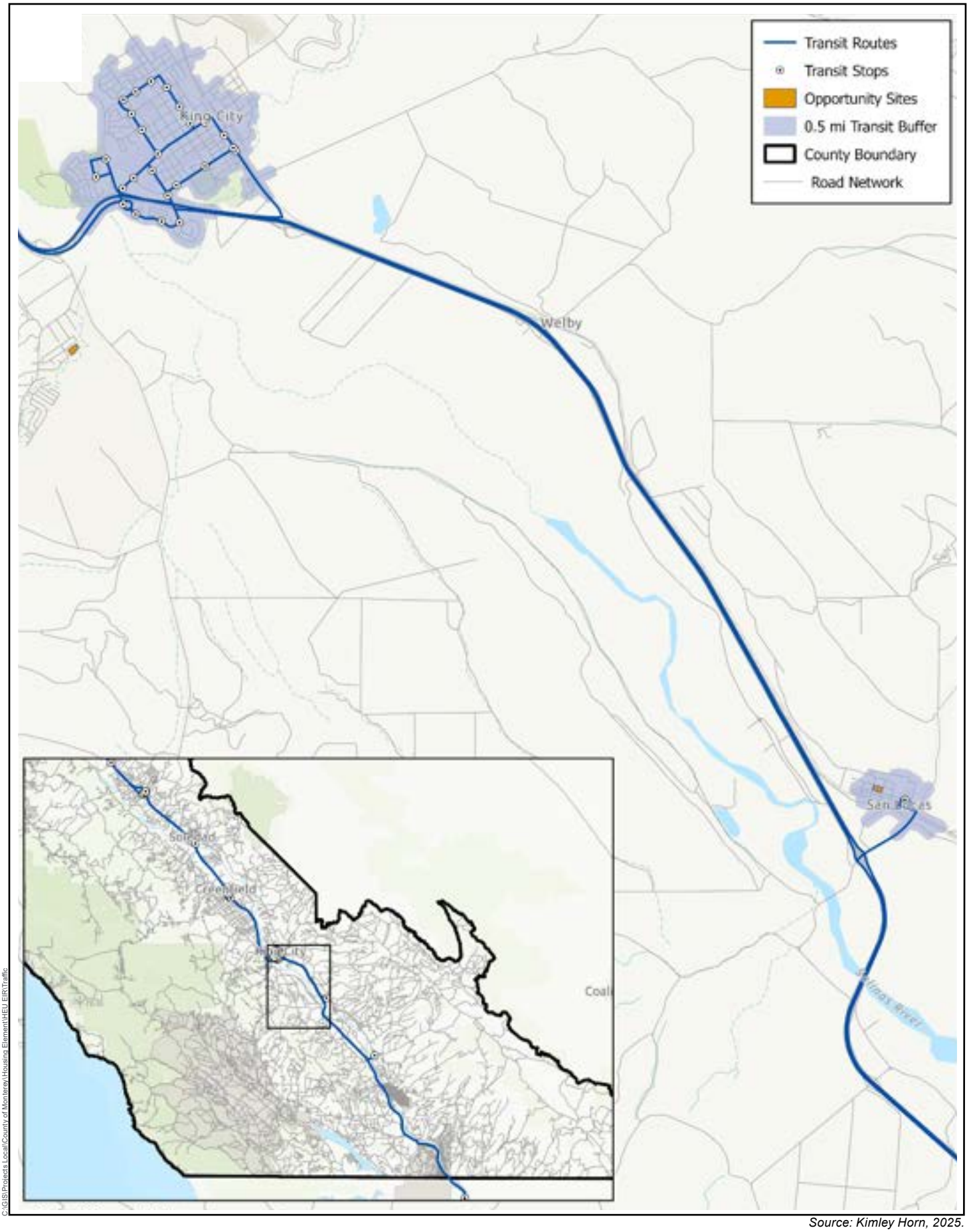
*Source: Kimley Horn, 2025.*

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**Figure 4.16-3**

North County Transit Network with Buffer

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*Source: Kimley Horn, 2025.*

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**Figure 4.16-4**

South County Transit Network with Buffer

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# 4.17 Tribal Cultural Resources

This section evaluates the potential for impacts related to Tribal Cultural Resources (TCRs) resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts on TCRs, particularly from conversion to residential uses due to implementation of HEU6.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

This section is based on the Cultural Resources Technical Report (CRTR) prepared for the project by Harris & Associates and Assembly Bill (AB) 52 and Senate Bill (SB) 18 consultation conducted by the County. The CRTR is included as Appendix H to this PEIR.

## 4.17.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address TCRs.

### 4.17.1.1 Federal

#### Native American Graves Protection and Repatriation Act (U.S. Code, Title 25, Section 3001 et seq.)

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 provides a process for museums and federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants and culturally affiliated Native American Tribes and Native Hawaiian organizations. Refer to Section 4.5.1.1 for a full description of the NAGPRA.

### 4.17.1.2 State

#### Assembly Bill 52: Native Americans: California Environmental Quality Act

AB 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process for California Native American Tribes as part of the California Environmental Quality Act (CEQA) and equates significant impacts on TCRs with significant environmental impacts (California Public Resources Code [PRC], Section 21084.2). PRC Section 21074 defines TCRs as follows:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

Sacred places can include but are not limited to Native American sanctified cemeteries, places of worship, religious or ceremonial sites, culturally significant landscapes, features, or objects of cultural value to a Native American Tribe, and sacred shrines. In addition, both unique and non-unique archaeological resources, as defined in California PRC Section 21083.2, can be TCRs if they meet the criteria detailed above. The lead agency relies on substantial evidence to make the determination that a resource qualifies as a TCR when it is not already listed in the California Register of Historical Resources or a local register.

AB 52 defines a "California Native American Tribe" as a Native American Tribe in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) (PRC Section 21073). Under AB 52, formal consultation with Tribes is required before determining the level of environmental document if a Tribe has requested to be informed by the lead agency of proposed projects and if the Tribe, upon receiving notice of the project, accepts the opportunity to consult within 30 days of receipt of the notice. AB 52 also requires that consultation, if initiated, address project alternatives and mitigation measures for significant effects if specifically requested by the Tribe. AB 52 states that consultation is considered concluded when the parties agree to measures to mitigate or avoid a significant effect on TCRs or when either the Tribe or the lead agency concludes that mutual agreement cannot be reached after making a reasonable, good-faith effort. Under AB 52, any mitigation measures recommended by the lead agency or agreed on with the Tribe may be included in the final environmental document and in the adopted Mitigation Monitoring and Reporting Program if the mitigation measures were determined to avoid or lessen a significant impact on a TCR.

If the recommended measures are not included in the final environmental document, then the lead agency must consider the four mitigation methods described in California PRC Section 21084.3(e). Any information submitted by a Tribe during the consultation process is considered confidential and is not subject to public review or disclosure. It will be published in a confidential appendix to the environmental document unless the Tribe consents to disclosure of all or some of the information to the public.

### Senate Bill 18: Traditional Tribal Cultural Places

SB 18 (California Government Code, Sections 65352.3 and 65352.4) requires that, before the adoption or amendment of a General Plan, a city or county must consult with Native American Tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects in that jurisdiction. Refer to Section 4.5.1.2 for a full description of SB 18.

### California Native American Graves Protection and Repatriation Act

The California NAGPRA required certain state agencies and museums that have possession or control over collections of human remains or cultural items, as defined therein, to complete an inventory and summary of these remains and items, and provides a process for the identification and repatriation of these items to the appropriate Tribes. Refer to Section 4.5.1.2 for a full description of the California NAGPRA.

#### *California Public Resources Code, Section 5097 et seq.*

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. Refer to Section 4.5.1.2 for a full description of the California PRC Section 5097.

### 4.17.1.3 Local

Refer to Section 4.5, Cultural Resources, for a full description of local regulations related to archaeological resources, TCRs, and human remains.

## 4.17.2 Environmental Setting

Refer to Section 4.5 for information on the environmental setting, including a description of the history of Monterey County and results from previous cultural investigations.

### 4.17.2.1 Tribal Consultation

#### Sacred Lands File Search

Harris & Associates contacted the NAHC for a Sacred Lands File search to determine whether Sacred Lands are present in the project area. In September 2024, the NAHC provided a positive response to the Sacred Lands File check and recommended that the list of Tribes provided be contacted for more information. The NAHC identified 22 Native American representatives as potentially having local knowledge of TCRs in Monterey County. All Tribal points of contact on the list provided by the NAHC were contacted by email and/or regular mail for any information they may have regarding Sacred Lands that may be present in the project area. To date, no responses have been received. Details on Tribal consultation are on file with the County.

#### Government-to-Government Consultation

The County is also conducting AB 52 and SB 18 government-to-government consultation. The County sent notification of SB 18 consultation on December 1, 2022, and notification of AB 52 consultation on October 30, 2024. County staff have met with the Esselen Tribe of Monterey County, Ohlone Costanoan Esselen Nation, and Indian Canyon Band of Costanoan to discuss the project.

The County consulted with the Esselen Tribe of Monterey County on February 17, 2023, as part of SB 18 consultation. The County re-engaged the Esselen Tribe of Monterey County for additional consultation as part of SB 18 and AB 52 on February 4, 2026 due to subsequent updates to the Opportunity Sites inventory. During consultation, the Esselen Tribe of Monterey County identified and requested:

- Consultation for large development projects for subdivisions that may be located in areas of cultural significance.
- For staff to recognize that the County works with outdated maps of Tribal resource areas. They request to work with the County to identify sensitive areas for potentially uncovering cultural resources at parcels in the Sites Inventory for the Housing Element Sixth Cycle (2023–2031) update of the General Plan and contribute to development of policies and programs for staff consideration.
- Requested notification on the development of Site 52 through AB 52 and that as many protective measures be in place for development of the site as possible.
- That projects proposed in areas sensitive for cultural significance to Native Tribes indigenous to the land be provided an opportunity for consultation under CEQA and pursuant to state law (AB 52).
- That streamlined permits accommodate residential construction for anticipated generational growth.

County staff did not receive a request for AB 52 consultation from the Esselen Tribe of Monterey County, but followed up with a notice of closing the window of opportunity for consultation as a gesture of goodwill in continued collaboration.

The County consulted with the Ohlone Costanoan Esselen Nation on March 1, 2023, as part of SB 18 consultation and on November 12, 2024, as part of AB 52 consultation. The County also received a letter from Ohlone Costanoan Esselen Nation during the initial public review process for the County's Sites Inventory requesting that the County not include portions of Opportunity Site 52 due to the presence of "culturally significant" areas on the site. The County addressed this concern as discussed in Section 4.17.5, Project Impacts and Mitigation.

The County re-engaged the Ohlone Costanoan Esselen Nation for additional consultation as part of SB 18 and AB 52 on June 2, 2026 due to subsequent updates to the Sites Inventory. During consultation, the Ohlone Costanoan Esselen Nation identified and requested:

- To see in the General Plan that the Ohlone Tribe is notified of any ground disturbance in Monterey County and function as the monitor for any project monitoring requirement.
- Concerns with meaningful consultation. No decisions will be made, and discussion does not make a difference with what is written or what happens.

  The County HCD Director identified that policies need input from Tribes to comply with SB 18, and staff needs to present actions proposed by the Ohlone Tribe to County decision-makers who might be able to accept and approve the Tribe's most critical priority for implementation within state and local guidelines.
- No public map of Sacred Sites.
- To know the size and location of all ground disturbance in Monterey County and that none are along the Coast or the Salinas River.
- Not supportive of specific locations as they are areas of sensitive Tribal activity.
- Concerns about ministerial laws and approvals, specifically concerned with requirements for discoveries, and how to ensure that proper protections are in place.
- Contractors need to have training on resources to understand what is found.
- Not supportive of the development of Tarpy Flats due to cultural sensitivity of the site. Hiss Parcel Project directly adjoins the site and was acquired by Big Sur Land Trust for preservation of wildlife habitat and cultural values for the Ohlone Costanoan-Esselen Nation.
- Concerns related to ministerial approval process for future development projects and Tribal notification.

Outside of consultation, comments were received from the Indian Canyon Band of Costanoan when the project was presented to the Airport Land Use Commission. The Indian Canyon Band of

Costanoan requested consultation, preparation of educational materials, and monitoring. As requested, the County met with the Tribe on July 9, 2026. During the meeting, the Indian Canyon Mutsun Band of Costanoan identified and requested:

- Cultural sensitivity and awareness training for construction workers that have the potential to unearth Tribal resources.
- Provision of Tribal cultural monitoring for sites with archaeological and Tribal cultural sensitivity.
- Incorporation of educational materials and opportunities in project design for projects of value to Tribal nations (i.e. murals, informational placards).
- Provision of Tribal easements where possible to allow for Tribal nations to access lands of Tribal value.

### Native American and Archaeological Resources Technical Panel

The Native American and Archaeological Resources Technical Panel is an additional forum for engagement with Native Tribes. In addition to meeting with Tribes, the County provided a presentation of the early Draft Sites Inventory on May 4, 2023, and provided a Housing Element status update on October 31, 2024, to the Native American and Archaeological Resources Technical Panel.

## 4.17.3 Method of Analysis

This section is based on the CRTR prepared for the project by Harris & Associates and AB 52 and SB 18 consultation conducted by the County. The CRTR is included as Appendix H to this PEIR.

Using the criteria for determining significance described below, analysis of the impacts of the project on TCRs is based on the location and designation of TCRs in Monterey County. Therefore, this section of the PEIR evaluates each opportunity site parcel (rather than buildout of a reasonable or theoretical maximum of housing units) to determine impacts on TCRs.

## 4.17.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on TCRs if it would:

- **Threshold 1:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

## 4.17.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to TCRs that could result from implementation of the project.

### 4.17.5.1 Threshold 1: Tribal Cultural Resources

**Threshold 1:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

#### Impact Analysis

Pursuant to California PRC Section 21080.3.1 (AB 52), and California Government Code, Sections 65352.3 and 65352.4 (SB 18), California Native American Tribes traditionally and culturally affiliated with a project site can request notification of projects within their traditional cultural territory.

As described in Section 4.17.2, Environmental Setting, the NAHC was contacted for a Sacred Lands File search to determine whether Sacred Lands are present in the project area. Tribes identified by the NAHC were contacted, and no responses to this contact were received. In accordance with SB 18 and AB 52, Native American consultation was conducted by the County to identify TCRs in the project area and develop adequate treatment and mitigation measures to

reduce potential project impacts to significant archaeological sites with cultural and religious significance to the Native American community. Refer to Section 4.17.2.1 for details of consultation efforts.

As described above, the County received a letter from Ohlone Costanoan Esselen Nation requesting that the County remove portions of Opportunity Site 52 from HEU6 due to the presence of "culturally significant" areas on the site. The County removed portions of Site 52 and other previous sites in this area and proposes to split zone the site in response to this and other public comments. The split zoning would allow residential uses on a portion of the site and would preserve the remaining portions through Resource Conservation zoning. The Resource Conservation zone would limit development to preserve the environmental resources, including biological resources and TCRs. Therefore, while Opportunity Site 52 is still included as part of the Sites Inventory, the County removed portions of Site 52 and other previous sites in this area in response to the Tribe's comment and other public comments.

The County also coordinated with the Indian Canyon Band of Costanoan as a result of comments that were received outside of consultation. The Tribe requested sensitivity training and awareness for construction workers, incorporation of educational materials and opportunities into the project design, tribal monitoring, and tribal easements. The project is conditioned to evaluate TCRs in areas with documented or inferred resources as identified on the County's resource maps or in Table 4.5-1 through the preparation of an archaeological resources assessment report as part of the development application package. The assessment would include a Phase I Inventory of Archaeological Resources as required by MM-CUL-OBJ-5 and MM-CUL-CONS-6. The Phase I evaluation must include, at a minimum, a records search of available resource information at the Northwest Information Center of the California Historic Resources Information System to determine whether a part or all of the project area has been previously surveyed for archaeological resources, whether any known archaeological resources have already been recorded on or adjacent to the project area, and whether the probability is low, moderate, or high that archaeological resources are in the project area. Following the background research, a field survey by a professional archaeologist must be conducted, including an inspection of the site for evidence of surface and, if appropriate, subsurface archaeological resources. A Phase II or Phase III evaluation may be required dependent on results of the Phase I assessment and project design. If TCRs are identified, avoidance and preservation is required by MM-CUL-OBJ-7 and MM-CUL-CONS-8, which may include placing the resource within a permanent conservation easement, to the extent feasible. If resources are known or suspected to be present, the archaeologist may recommend conditions including archaeological and/or tribal monitoring. Therefore, the measures outlined in MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7 and MM-CUL-CONS-8 consider the Tribe's concerns related to the potential for unknown TCRs on the opportunity sites, tribal monitoring, and tribal easements.

No other information was obtained from Native American outreach and consultation that any other resources are present in the project area that would be considered culturally or spiritually significant. Traditional Cultural Properties that currently serve religious or other community practices are known to exist in the project area. As described in Section 4.5, pre-contact resources were identified within the vicinity of the opportunity sites during the archaeological evaluation prepared for the CRTR. Not all recorded pre-contact resources have been fully evaluated to determine their significance as archaeological resources or TCRs, and the opportunity sites themselves have not been individually assessed.

Project-related ground-disturbing activities have the potential to encounter previously unrecorded TCRs at individual opportunity sites. Activities such as clearing, trenching, and grading could damage or destroy TCRs that may be present on or below the ground surface. Adverse effects to known or uncovered significant TCRs could result in the loss of valuable information or material culture to Tribes. Therefore, site-specific analysis would be required when future residential development projects are proposed. Unevaluated TCRs may require additional research, evaluation, or testing to determine their eligibility for inclusion in the National Register of Historic Places, California Register of Historical Resources, or Monterey County Register of Historic Resources.

To comply with all relevant site-specific County regulations and policies, including the Conservation and Open Space Element Goals and Policies (Goal OS-8; Policies OS.8-1 through OS.8-7), Carmel Valley Master Plan (Policy CV-3.13), North County Land Use Plan (General Policy 2.9.2), Carmel Area Land Use Plan (General Policy 2.8.3), Coastal Implementation Plans for North County Area and Carmel Area, and Monterey County Code (County Code), Sections 20.66.050 and 21.66.050, Standards for Archaeological and Tribal Cultural Resources Protection (refer to Section 4.5.1.3), a Phase I Inventory of Archaeological Resources is required for future development streamlined under the HEU6, meeting the standards contained in Subsection D of the same section, based on the archaeological sensitivity as mapped on the County's archaeological resource maps. However, regardless of Monterey County's mapped archaeological sensitivity, the potential for previously unidentified TCRs exists in the project area.

As shown in Table 4.5-1, all opportunity sites are classified as having one or more low, moderate, or high cultural sensitivity designations, and some sites fall within multiple categories. Additionally, the sensitivity classifications derived from the County's geographic information system map data and those identified in the CRTR are not fully consistent. In certain areas, the County's existing mapping identifies an opportunity site as being in a high-sensitivity area, whereas the technical memorandum identifies it as low sensitivity, and vice versa. Therefore, a site-specific evaluation would be required to ensure that adequate protection of TCRs is provided.

Implementation of the project could potentially cause substantial adverse changes in the significance of TCRs and result in a potentially significant impact without mitigation. To reduce the potential for direct impacts from damage and disturbance to significant TCRs, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would be required.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.17.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to TCRs that could result from implementation of the project. Considering the site-specific nature of the TCR analysis, the cumulative project study area was defined in a local context and includes the surrounding areas of each opportunity site, which are in the UMC, except Opportunity Site 53, which is in the City of Marina.

### 4.17.6.1 Cumulative Threshold 1: Tribal Cultural Resources

As discussed in Section 4.17.5.1, no known TCRs were identified in the project area during Tribal consultation and coordination; however, there is potential for the presence of unknown TCRs in and around the project area. Future development in UMC could affect as-yet undiscovered resources. However, similar to the proposed project, cumulative developments would be required to assess and mitigate potential impacts in accordance with applicable federal, state, and local regulations. Specifically, projects in UMC must comply with the Monterey County General Plan (2010 General Plan) Conservation and Open Space Element Goal OS-8 and Policies OS.8-1 through OS.8-7, Carmel Valley Master Plan Policy CV-3.13, North County Land Use Plan General Policy 2.9.2, Carmel Area Land Use Plan General Policy 2.8.3, Coastal Implementation Plans for North County and Carmel Area, and County Code, Sections 20.66.050 and 21.66.050, Standards for Archaeological and Tribal Cultural Resources Protection. With implementation of appropriate mitigation by qualified professionals, the project's contribution to cumulative impacts on TCRs would be reduced to a less than significant level. Therefore, the project's contribution to cumulative impacts on TCRs would not be cumulatively considerable.

### Significance of Impacts

Potentially significant impact.

### Mitigation Measures

Refer to MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.17.7 Conclusion

Implementation of MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would reduce potential impacts pertaining to TCRs to a less than significant level.

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# 4.18 Utilities and Service Systems

This section evaluates the potential for impacts related to utilities and service systems resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts on the capacity and demand related to utility infrastructure for water supply, wastewater treatment, and solid waste. This section also briefly discusses energy delivery, stormwater drainage facilities, and telecommunications. Refer to Sections 4.6, Energy, and 4.10, Hydrology and Water Quality, for detailed analysis regarding energy demand and stormwater drainage, respectively.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

The project also includes a tiered rezoning approach. Opportunity sites that are able to annex into or are located within an existing service district boundary for water or wastewater connections would be rezoned to HDR/30. Opportunity sites that are not within proximity to existing service districts for water or wastewater connections would be rezoned to HDR/25. Refer to Section 3.5.3, Opportunity Sites Inventory, for a detailed list of proposed rezoning.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.18.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address utilities and service systems. Refer to Sections 4.6 and 4.10 for the regulatory settings related to electricity, natural gas, and stormwater.

#### 4.18.1.1 Federal

### Clean Water Act

The federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law that regulates water quality in the United States. It forms the basis for several state and local laws throughout the country. The Clean Water Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. At the state and regional levels in California, the Clean Water Act is administered and enforced by the State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs).

### Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) regulates public water systems that supply drinking water (42 U.S. Code, Section 300[f] et seq.; 40 Code of Federal Regulations [CFR], Section 141 et seq.). The principal objective of the federal SDWA is to ensure that water from the tap is potable (safe and satisfactory for drinking, cooking, and hygiene). The main components of the federal SDWA are to:

1. Ensure that water from the tap is potable
2. Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
3. Regulate the discharge of wastes into underground injection wells pursuant to the Underground
4. Injection Control program (refer to 40 CFR Section 144)
5. Regulate distribution systems

### Resource Conservation and Recovery Act

Title 40 of the CFR, Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria.

### 4.18.1.2 State

#### Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires Groundwater Sustainability Plans (GSPs) to be developed for medium- and high priority groundwater basins. Because groundwater basins often do not follow jurisdictional boundaries, local agencies may partner to form a groundwater sustainability agency, which is responsible for implementing its GSP. Refer to Section 4.10 for additional information.

#### CCR Title 22, Div 4, Ch 3 – Recycled Water

The California Code of Regulations, Title 22, Division 4, Chapter 3, Sections 60301 through 60355, are used to regulate recycled wastewater and are administered by the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from undisinfected secondary recycled water to disinfected tertiary recycled water. Title 22 lists 40 specific uses allowed with disinfected tertiary recycled water (such as irrigating parks), 24 specific uses allowed with disinfected secondary recycled water (such as irrigating animal feed and other unprocessed crops), and seven specific uses allowed with undisinfected secondary recycled water (such industrial uses).

#### California Building Standards Code

The California Building Standards Code includes code sections for buildings, residential, electrical, mechanical, plumbing, energy, fire, existing buildings, and the Green Building Standards (CALGreen). CALGreen sets requirements and regulates building standards for energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen includes a suite of mandatory provisions for new residential as well as substantial alterations to existing buildings. With each new iteration of the California Building Standards Code, the state has pushed forward requirements for new development to move away from natural gas reliance, shifting to electrical-only appliances, solar requirements, and electric vehicle charging stations. The County of Monterey wholly adopts the California Building Standards Code, with amendments for local requirements, under Title 18 – Buildings and Construction, of the Monterey County Code (County Code).

#### Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code, Section 10610 et seq.), which requires urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies. All urban water suppliers as defined in Section 10617 (including wholesalers), either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more

than 3,000 acre-feet (AF)[1] annually are required to prepare an Urban Water Management Plan (UWMP). Every 5 years, water suppliers are required to develop UWMPs to identify short-term and long-term water demand management measures to meet growing water demands.

### California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates energy, transportation, telecommunications, and water within the state. The Energy Division of the CPUC regulates investor-owned utilities and their consumer rates, including Pacific Gas & Electric (PG&E). The Water Division of the CPUC regulates over 100 investor-owned water and sewer utilities under the CPUC's jurisdiction providing water service to about 16 percent of California's residents. Within Monterey County, the CPUC has oversight of Alisal Water Corporation, Arroyo Center Water, California American Water Company (Cal-Am), California Water Service Company, Canada Woods Water Company, Little Bear Water Company, and Spreckels Water Company.

### California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, this Act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from land disposal by the year 2000 through source reduction, recycling, and composting activities, and requires the participation of the residential, commercial, industrial, and public sectors.

### Senate Bill 610 and Senate Bill 221

Senate Bill (SB) 610 and SB 221 became effective January 1, 2002. SB 610, codified in California Water Code Division 6, Part 2.6, Sections 10910 et seq., describes requirements for Water Supply Assessments (WSAs) and UWMPs applicable to the California Environmental Quality Act (CEQA) process. SB 610 requires that water suppliers must prepare a WSA for projects that are subject to CEQA and exceed a specified minimum size to determine if the projected water demand associated with the project is included as part of the most recently adopted UWMP. The size requirement is specified according to development type but generally includes developments with water consumption that would be equal to or greater than the amount of water required by a 500-dwelling unit project.

### Assembly Bill 1881

AB 1881, the Water Conservation in Landscaping Act of 2006, requires the California Department of Water Resources to prepare an updated Model Water Efficient Landscaping Ordinance (Model Ordinance) in accordance with specified requirements to conserve water through efficient

[1] One acre-foot of water is equal to 325,851 gallons.

irrigation and landscaping. By January 1, 2010, local agencies were to adopt either the updated Model Ordinance or a local landscape ordinance that is at least as effective in conserving water as the Model Ordinance.

### Assembly Bill 939: California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) established the current organization, structure, and mission of the California Department of Resources Recycling and Recovery with an integrated waste management hierarchy that consists of the following (in order of importance): source, reduction, recycling, composting, and land disposal of solid waste. AB 939 requires counties to develop an integrated waste management plan that describes local waste diversion and disposal conditions, and lays out realistic programs to achieve the waste diversion goals.

### Senate Bill 1016

SB 1016 of 2007 (Statutes of 2007, Chapter 343) requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Since January 1, 2018, the Board is required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

### Assembly Bill 341

In 2011, the California Legislature enacted AB 341 (California Public Resources Code, Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 also requires the provision of recycling service to commercial facilities that generate 4 cubic yards or more of solid waste per week and multi-family facilities with five or more units.

### Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. Organic waste means food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. For businesses that generate 8 or more cubic yards of organic waste per week, this requirement began on April 1, 2016, while those that generate 4 cubic yards of organic waste per week must have an organic waste recycling program in place beginning January 1, 2017. The requirement becomes more stringent in following years. Multi-family properties are regulated but are only required to divert green waste and non-hazardous wood waste. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including certain multi-family residential dwellings, as described

previously, starting on January 1, 2016. Mandatory recycling of commercial organics would be phased in over time, and an exemption process is available for rural counties.

### Senate Bill 1383

Senate Bill 1383 (Lara, Chapter 395, Statutes of 2016) passed in 2016 as part of California's larger strategy to combat climate change. This law is the largest and most prescriptive waste management legislative update in California since AB 939. As it pertains to municipal solid waste management, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The regulations are effective January 1, 2022, and require jurisdictions to provide programs and enforcement necessary to ensure all residents and businesses recycle organics. Under this law, organics includes food and food-soiled paper waste, landscape cuttings, cardboard, paper, and non-treated wood waste. Certain businesses that make, package, prepare, and/or sell food must donate edible food that would otherwise be disposed to food banks for redistribution to people in need.

### Senate Bill 244

SB 244 was enacted in 2011 to address infrastructure and municipal service deficiencies in disadvantaged unincorporated communities (DUCs). SB 244 added California Government Code Section 65302.10, which requires counties to identify DUCs and analyze the extent to which those communities lack access to essential public services, including potable water, wastewater treatment, storm drainage, and structural fire protection. The law also requires consideration of financing mechanisms and planning strategies to improve infrastructure and service delivery to identified communities.

## 4.18.1.3 Local

### 2010 General Plan (Inland)

#### *Public Services Element*

The Public Services Element of the Monterey County General Plan (2010 General Plan) addresses water supply and facilities, wastewater collection and disposal, and solid waste management. Goal PS-1 ensures that adequate public facilities and services (APFS) and the infrastructure to support new development are provided over the life of this plan. Policy PS-1.1 establishes APFS requirements including "Infrastructure and Service Standards" (Table PS-1 of the General Plan) concurrent with the impacts of such development; encourages development in infill areas where APFS are available, while acknowledging the rights of property owners to economically viable use of existing legal lots of record throughout the County; and seeks to achieve acceptable level of service standards through improvements funded by fair share impact fees and planned capital

improvements. Policy PS-1.3 states that no discretionary application for new development shall be approved unless the County finds that APFS for that use exist or will be provided concurrent with the development. Policies PS-1.4 through PS-1.6 address the cost, timing, and requirement of approval of APFS to serve the development.

Goal PS-2 and associated policies assure an adequate and safe water supply to meet the County's current and long-term needs. New development shall be required to connect to existing water service providers where feasible. Connection to public utilities is preferable to other providers.

Goal PS-3 ensures that new development is assured a long-term sustainable water supply. Policy PS-3.1 prohibits approval of discretionary development projects without specific findings and evidence that there is a long-term, sustainable water supply, both in quality and quantity to serve the proposed development. Policy PS-3.1 includes certain exceptions to this requirement, including a rebuttable presumption of a sustainable water for development in Zone 2C of the Salinas Valley Groundwater Basin be exempt from providing proof of a long-term sustainable water supply pending the results of a study of regarding Zone 2C groundwater levels and seawater intrusion. In August 2024, the Board of Supervisors received the Salinas Valley Groundwater Basin Investigation Report (Investigative Report).

The 2010 General Plan EIR projected that agricultural water demand would decrease by 2030, and urban demand would increase, with a net projected decrease in water demand. However, the Investigative Report found that as of 2020, total water demand has increased, and more groundwater is being pumped than assumed in the 2010 General Plan EIR. As such, under Policy PS-3.1, development in Zone 2C now requires providing proof of a long-term sustainable water supply as in no longer exempt from these provisions outlined in PS-3.1. The County is in the process of determining next steps in partnership with the Salinas Groundwater Sustainability Agency on how to implement the recommendations of the Report, including possible amendments to PS-3.1 to reflect completion of the report and requirements for development in Zone 2C.

Policy PS-3.2 details the specific criteria for proof of a long-term sustainable water supply.

Goal PS-4 and associated policies ensure adequate treatment and disposal of wastewater.

Goal PS-5 and Goal PS-6 addresses the amount of solid waste that is diverted from local landfills through recycling, composting and source reduction and ensures the disposal of solid waste in a safe and efficient manner. Policy PS-6.5 requires new development projects shall provide for handling of waste in a manner that conforms to state-mandated diversion and recycling goals. Site development plans shall include adequate solid waste recycling collection areas.

Goal PS-13 ensures the efficient distribution of public utilities by reserving sufficient land or rights-of-way to provide utilities for the County's current and future needs.

## Area and Master Plans

In addition to the above 2010 General Plan goals and policies, the following Area and Master Plans have supplemental policies related to hydrology and water quality.

### *Toro Area Plan*

Policy T-4.1 of the Toro Area Plan prohibits land uses and practices that may contribute to significant increases of siltation, erosion, and flooding.

### *Central Salinas Valley Area Plan*

Policy CSV-5.1 of the Central Salinas Valley Area Plan states that development shall be designed to maintain groundwater recharge capabilities on the property. To protect and maintain areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity, the main channels of the Arroyo Seco River and the Salinas River shall not be encroached on by development.

### *Greater Monterey Peninsula Area Plan*

Policy GMP-3.14 encourages development projects to be served by water from public utilities or mutual water companies. If this is not possible, the County shall consider the cumulative effects of the development's water use on wildlife, fish, and plant communities, and the supply available to existing users.

### *North County Area Plan (Inland)*

Policy NC-1.5 requires comprehensive review of infrastructure constraints, including water supply, for residential development. Policy NC-3.8 requires discretionary permits for all new wells in fractured rock or hard rock areas. Policy NC-3.9 protects highly erodible steep slopes from development. Policies NC-5.1 through NC-5.4 address groundwater recharge, prioritization of water supply projects, watershed basin conservation and protection programs, and water quality.

### *Greater Salinas Area Plan*

Policy GS-1.13 requires comprehensive review of infrastructure constraints, including water supply, for residential development.

### *Carmel Valley Master Plan*

Policy CV-1.8 states that development should be consistent with wastewater application rates of the Carmel Valley Wastewater Study that generally would require clustering of five units or less on a minimum of five acres of land. Policies CV-5.1 through CV-5.5 address pumping from the Carmel River aquifer, support of water projects, water reclamation, limitations of development on vacant land unless it does not adversely affect groundwater recharge, and proper design of septic systems.

### *Fort Ord Master Plan*

Hydrology and Water Quality Policies (and applicable programs):

- C-5, the County shall support all actions necessary to ensure that wastewater treatment facilities operate in compliance with waste discharge requirements adopted by the California Regional Water Quality Control Board.
- C-7, the County shall condition all development plans on verification of adequate wastewater treatment capacity.

## Community Plans

### *Castroville Community Plan*

Goal 5 and Policy 5.3 of the Castroville Community Plan address protection of important natural and human-made resources through water conservation and water quality improvement projects. Goal 10 and Policies 10.1, 10.2, 10.5, and 10.8 pertain to adequate public services and infrastructure to meet the needs of existing and new development, including flood control facilities.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan*

Key Policy 2.5.1 requires that the water quality of the North County groundwater aquifers shall be protected, and new development shall be controlled to a level that can be served by identifiable, available, long-term water supplies. The estuaries and wetlands of North County shall be protected from excessive sedimentation resulting from land use and development practices in the watershed areas. General Policies 2.5.2(1–6) generally address water quality and water supply. Policies 2.5.3.A(2), 2.5.3.A(3), 2.5.3.A(4) – Water Supply, support the County's long-term policy to limit groundwater use to the safe-yield level. Policies 2.5.3.B(1–6) address multiple facets of water quality including dumping, agricultural runoff monitoring, cumulative impacts on groundwater and surface water reservoirs, maintenance of septic systems, and study of seawater intrusion. Section 2.5.3.C outlines specific Erosion and Sedimentation Control measures and permit requirements. Section 2.5.4 outlines Recommended Actions to be taken by the County to meet these water quality and supply goals and policies.

Key Policy 3.2.1, General Policies 3.2.2, Specific Policies 3.2.3, and Recommended Actions 3.2.4, Wastewater Management: The rural areas of North County should continue to be served by septic or other high technology on-site wastewater management systems at appropriate densities to avoid individual or cumulative effects to public health and natural resources. Centralized sewers and treatment service should be provided for areas designated for high density development concentration and infilling, and areas which present significant public health hazards due to continued failure of on-site systems which cannot be corrected by on-site wastewater management programs.

### *Carmel Area Land Use Plan*

Key Policy 3.2.2 and Water Supply Policies 3.2.3 states that the County should reserve from its allotted water supply a sufficient quantity to accommodate coastal priority land uses proposed in the plan. Key Policy 3.3.2 and Wastewater Treatment Policies 3.3.3 address wastewater disposal systems and the establishment of water quality management and monitoring programs intended to protect and maintain a high level of water quality in the areas of special biological significance and in the Carmel Area's coastal streams. Policy 2.4.4.B.8 requires all new and/or expanding wastewater discharges into the coastal waters of Monterey County to require a permit from the Health Department.

Key Policy 3.3.2, Wastewater Treatment Policies 3.3.3 (Wastewater Treatment) states that the County should support wastewater disposal systems and the establishment of water quality management and monitoring programs intended to protect and maintain a high level of water quality in the areas of special biological significance and in the Carmel Area's coastal streams.

## Monterey County Code

Title 10 of the County Code sets regulations for health and safety with an emphasis on food safety, including health permit requirements, solid waste disposal, restrictions on foam food packaging, restrictions related to single use carryout bags, and requirements for organic waste disposable.

Chapter 10.41 – Solid Waste Collection and Disposal regulates requirements for solid waste collection and storage.

Chapter 10.45 – Organic Waste Disposable Reduction regulates requirements for organic waste disposable in compliance with SB 1383 (2016) and sets forth requirements on diverting organic waste from disposal in landfills and recovering edible food for food recovery organizations.

Title 15 of the County Code sets regulations for water, including domestic water systems with 2 to 199 service connections, water quality, water wells, and water conservation standards; wastewater, including disposal requirements, discharge prohibitions, and septic standards; and requirements for undergrounding utility facilities.

It is the intent of Chapter 15.04 – Domestic Water Systems, to implement General Plan policies by not allowing development in areas which do not have proven adequate supplies, requiring new development to connect to existing public water service providers, and discouraging large numbers of new wells into groundwater basins.

Chapter 15.06 – Point-Of-Use (POU) and Point-Of-Entry (POE) Water Treatment Systems. The County of Monterey regulates active local small water systems consisting of two to four service connections, and state small water systems consisting of five to fourteen service connections. Many of these water systems are impacted by contaminants of concern such as nitrate, arsenic,

fluoride or chromium. The County recognizes that centralized treatment systems treating contaminants of concern are expensive, and there is a lack of state funding for state and local small water systems. The installation of POU or POE water treatment devices is a viable affordable option for these impacted water systems while they pursue a long-term solution for provision of safe potable water such as but not limited to centralized water treatment, a new well, or consolidation. POE treatment ensures that all water entering a structure provides a higher level of protection to public health from ingestion and exposure to contaminants than POU treatment.

Chapter 15.08 – Water Wells. The purpose of this chapter to provide for the permitting of construction, repair, and reconstruction of all wells, including cathodic protection wells, test wells, observation wells, and monitoring wells, to the end that the groundwater of this County will not be polluted or contaminated and that water obtained from such wells will be suitable for the purpose for which used and will not jeopardize the health, safety or welfare of the people of this County. It is also the purpose of this chapter to provide for the destruction of abandoned wells, monitoring wells, observation wells, test wells, and cathodic protection wells found to be public nuisances, or when otherwise appropriate, to the end that all such wells will not cause pollution or contamination of groundwater.

Chapter 15.20 – Sewage Disposal regulates on-site wastewater treatment systems (septic tanks) and connections to public sewer systems. Specifically, the County requires new wastewater generating development to be connected to an approved sanitary sewer when a sewer main is located within 300 feet of the structure and when parcel abuts the road, street, or alley where the sewer main is located.

Chapter 15.23 – Sewage Treatment and Reclamation Facilities contains regulations that prohibit the discharge of sewage in a manner which may cause contamination of groundwater supplies.

Chapter 15.32 – Underground Utility Facilities states that underground utility distribution facilities for supplying electric, communication, or similar or associated service shall be provided by property owner, or person in possession of such property. The responsibility of the property owner, or person in possession of such property is limited to the installation and completion of underground construction and conduits, conductors, and associated equipment necessary to maintain utility service from such underground utility distribution facilities to the building or structure being served from the property line of said property abutting the public, and is subject to the applicable rules, regulations and tariffs of the respective utility or utilities on file with the Public Utilities Commission of the State of California.

Chapter 16.16 – Regulations for Floodplains in Monterey County, of the County Code, seeks to minimize public and private losses due to flood conditions in hazard areas through regulating uses, requiring protections from floods, control alterations to floodplains, control grading, and regulate floodplain diversions. This chapter provides floodplain management regulations for all special

flood hazards areas (100-year floodplain). It provides standards for flood hazard reduction, which includes, but not limited to anchoring, construction materials and methods, elevation and floodproofing, and setbacks (A setback of two hundred (200) feet from the top of the bank of a river and fifty (50) feet from the top of the bank of a watercourse).

Title 18 – Buildings and Construction. Title 18 of the County Code provides provisions for buildings and structures, prohibiting to make any use of or to allow any use of a building or structures which are not allowed under this title. Each chapter of this title serves as the County's local regulations and adoption California construction codes and regulations by reference, including the California Building Code, electrical code, mechanical code, plumbing code, energy code, historical building code, fire code, existing building code, Green Building Standards, and other referenced standards and codes for buildings and construction.

Chapter 18.50 – Residential, Commercial, and Industrial Water Conservation Measures. The purpose and intent of this chapter to reduce the excessive use of water within the Greater Salinas, Toro, Greater Monterey Peninsula, and a portion of North County and Coast Planning areas by requiring the installation of low water use plumbing fixtures and low water use landscape material as part of new construction and prohibiting certain excessive use of water

Chapter 19.10 – Design and Improvement Standards. The purpose of this chapter is to provide regulations for the design and physical improvement of minor subdivisions and standard subdivisions and vesting subdivisions. It requires that the design and improvements of each subdivision comply with provisions in the chapter, which includes, but is not limited to, requiring improvement plans for all improvements other than landscaping to be prepared under direction and signed by a California registered professional civil engineer, and that improvement plans be in accordance with the Standard Details; Roadway Design Standards and Standard Property Development Specification of the County of Monterey on file in the office of the County Surveyor.

Section 20.64.170 – Water facilities in approved subdivisions. It is the purpose of this section to provide a mechanism whereby a Coastal Development Permit is not required for water system facilities in approved subdivisions.

Section 21.64.130 – Regulations for land use in the Carmel Valley floodplain. The purpose of this section is to protect the Carmel River and its corridor including visual aspects, value as wildlife habitat and stabilize the river channel; preserve the rural character of Carmel Valley; and promote the public health and safety by lessening local flood potential and flood related hazards.

### Coastal Implementation Plan

North County Coastal Implementation Plan, Section 20.144.070, Water Resource Development Standards provides development standards which will protect the water quality of the North County surface water resources and groundwater aquifers, control new development to a level that

can be served by identifiable, available, and long-term water supplies, and protect North County streams, estuaries, and wetlands form excessive sedimentation resulting from land use and development practices in the watershed areas.

North County Coastal Implementation Plan, Section 20.144.130, Wastewater Management Facilities Development Standards: The intent of this section is to provide for development of rural areas serviced by septic or other on-site wastewater management systems at densities which will protect public health and natural resources, and to provide for development of centralized sewer and treatment systems for high density residential areas and for areas which presents significant public health hazards due to system failure which cannot be corrected by on-site wastewater management programs.

Carmel Area Coastal Implementation Plan, Section 20.146.110, Water Supply/Wastewater Treatment Facilities Development Standards. The intent of this section is to ensure that the County reserve a sufficient quantity of water to accommodate coastal priority land uses proposed in the Carmel Area. Additionally, the intent of this section is to develop a manner in which the County is able to support successful wastewater disposal systems and the establishment of water quality management and monitoring programs intended to protect and maintain a high level of water quality in the 'Areas of Special Biological Significance' and in the Carmel Area coastal streams.

### Groundwater Extraction Management System Program

The Monterey County Water Resources Agency has collected groundwater extraction and water conservation information through the Groundwater Extraction Management System (GEMS) program since 1993. The GEMS program provides information to effectively monitor groundwater resources used in the Salinas Valley Groundwater Basin.

The Monterey County Water Resources Agency (MCWRA) and the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) are partnering to improve the collection and storage of regional groundwater data through the Groundwater Monitoring Program (GMP). The GMP includes: well registration, groundwater elevation monitoring, groundwater quality monitoring (Sea Water Intrusion), and groundwater extraction monitoring. The partnership establishes one cohesive program to comply with the regulatory-driven monitoring requirements under the Sustainable Groundwater Management Act, while ensuring efficiency and transparency. The key goal is to improve the availability of accurate and timely groundwater information, which aids in effectively managing water resources. The SVBGSA is charged with achieving sustainability in the Salinas Valley Groundwater Basin, which extends from the southern boundary of Monterey County to northwestern Monterey County.

Through the GMP, the expansion of well registration and groundwater extraction monitoring requires all wells in the Salinas Valley Groundwater Basin to be registered with the MCWRA.

Those wells extracting more than two AF per year (i.e., non-de minimis) will also need to report extraction data to MCWRA.

### Integrated Regional Water Management Plans

Integrated Regional Water Management (IRWM) is a collaborative effort to identify and implement water management solutions on a regional scale that increase regional self-reliance, reduce conflict and manage water to concurrently achieve social, environmental, and economic objectives. IRWMs differ from traditional approaches to water resource management by integrating all facets of water supply, water quality, wastewater, recycled water, floodwater, and stormwater management. Three IRWM Plans encompass Monterey County: Greater Monterey County, Monterey Peninsula, and Pajaro River Watershed. Figure 4.18-1, Major Water Service Providers in Monterey County, shows boundaries of these three IRWM areas.

## 4.18.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to utilities and service systems.

### 4.18.2.1 Water Supply and Demand

Monterey County is underlain by numerous aquifers that supply water to users throughout the region. Monterey County is isolated from state and federal water supplies and must rely solely on its local water resources, historically, groundwater and surface water from watersheds with negligible influence from snowpack. Monterey County principally relies on local groundwater and surface water sources to supply the region's demand, with none imported from outside sources (e.g., the State Water Project) (Greater Monterey County RWMG 2018).

Much of the UMC is served by private individual water wells, local and state small water systems (2–14 connections), or small public water systems (15–199 connections), with limited areas served by large public water systems (200 or more connections). Where public water is available, infrastructure for new housing is limited and adds substantial costs for construction. Water supply is handled by numerous different entities throughout Monterey County (cities, special assessment districts, investor-owned utilities, mutual water companies and individual property owners), making groundwater resource management difficult (County of Monterey 2013). Figure 4.18-1 illustrates five major water provider boundaries (California American Water Company, Castroville Community Services District, Marina Coast Water District, Pajaro Community Services District, and San Lucas Water District) in Monterey County; note that there are more water providers within Monterey County than shown on Figure 4.18-1.[2] Table 4.18-1, Opportunity Sites Within and Near Water Service Provider Territories, summarizes which opportunity sites are located within or near water service providers. Note that some service areas overlap, with entities managing different

[2] See LAFCO website for more information: https://www.countyofmonterey.gov/government/government-links/lafco/studies-maps

components of water service. Additionally, based on available mapping data, some sites may be located outside, but near, multiple water service provider areas and may require annexation to be served. The MCWRA is the primary regional water management agency for Monterey County, responsible for managing, protecting, and enhancing water supply. The Monterey Peninsula Water Management District (MPWMD) manages the water supply of the cities and unincorporated portions of the Monterey Peninsula, including Pebble Beach, Carmel Highlands, Carmel Valley, Monterra Ranch, Laguna Seca, Hidden Hills, and Pasadera.

**Table 4.18-1. Opportunity Sites Within and Near Water Service Provider Territories**

| Water Service Provider | Service Area Description | Opportunity Site(s)[1] | County Plan Area |
|---|---|---|---|
| California Water Service Company | Western City of Salinas, Las Lomas, Oak Hills, Salinas Hills, Country Meadows | 1 through 6, 24, 48 (combined total of 1,108 units) | Greater Salinas, North County Coastal, Toro |
| Castroville Community Services District | Castroville | 11 through 15, 30, 41 (combined total of 180 units) | North County Inland, North County Coastal |
| Little Bear Water Company | Pine Canyon | 42 (27 units) | Central Salinas Valley |
| Marina Coast Water District | City of Marina, portions of Fort Ord | 31, 53 (combined total of 607 units) | Greater Monterey Peninsula, Fort Ord |
| San Lucas County Water District | San Lucas | 32 through 34 (24 units) | Central Salinas Valley |
| California American Water Company – Monterey District/ Monterey Peninsula Water Management District | Monterey, Carmel, Seaside, Pacific Grove, Pebble Beach, Del Rey Oaks, Sand City, Carmel Valley, Salinas, and Chualar | 16 through 23, 25 through 29, 35 through 38, 40, 43, 45, 46, 52, 54 through 56 (combined total of 1,965 units) | Greater Monterey Peninsula, Carmel Valley, Carmel Area, Central Salinas Valley |
| Pajaro Valley Water Management Agency | Pajaro area, North County, Las Lomas | 48 through 51, 64 (combined total of 150 units) | North County Inland, North County Coastal |
| Pajaro/Sunny Mesa Community Services District | Pajaro area, Prunedale, North County | 8 through 10, 39, 44, 48 through 51, 64 (combined total of 527 units) | North County Inland |

**Sources:** Greater Monterey County RWMG 2018; Monterey Peninsula RWMG 2019; Pajaro River Watershed RWMG 2019.

[1] Note that some service areas overlap for different services. For example, Cal-Am operates the pipelines and distribution, but MPWMD handles the water supply. Additionally, some opportunity sites may appear multiple times due to proximity to different service providers.

Established by the Department of Water Resources, and consistent with the California Water Plan, the IRWM Grant Program encourages proactive collaboration of stakeholders and governments to manage local water supplies. IRWM Plans are developed and implemented by Regional Water Management Groups (RWMGs), which are made up of local agencies and organizations. IRWM Plans and RWMGs are intended to merge water resource boundaries (e.g., a groundwater basin) with political and jurisdictional boundaries (e.g., a city or water district) to increase cooperative water management efforts across a given region. Within Monterey County, three IRWM Plans are implemented by three RWMGs. Water supply and demand is discussed below for each IRWM region. Figure 4.18-1 shows the three IRWM areas. A hydrological description of each region can be found in Section 4.10.

Separate but related to IRWM Plans are UWMPs and GSPs. UWMPs are foundational long-term planning documents for water suppliers addressing historical and projected water demands, water supplies, reliability, vulnerabilities, and contingencies. Of the water service providers listed in Table 4.18-1, Cal-Am, California Water Service Company, and the Marina Coast Water District have 2020 UWMPs on file with the Department of Water Resources. The 2025 UWMPs are due to the Department of Water Resources in July 2026. Within Monterey County, there are currently seven approved GSPs and alternative plans, covering the sub-basins within the Salinas and Pajaro Valley basins. Each GSP covers a defined plan area encompassing a medium or high priority basin and includes elements such as a sustainability goal, groundwater conditions, a water budget, and a description of projects or steps to achieve and maintain sustainability of the basin. Importantly, each GSP contains a calculated water budget, which provides an accounting of the total annual volume of surface water and groundwater entering and leaving the groundwater basin. IRWM Plans use information from UWMPs and GSPs, among other sources, when assessing regional water resources. As indicated in Table 4.18-1 and discussed more in Section 4.10, opportunity sites identified within the HEU6 span multiple jurisdictions, service areas, groundwater basins, and watersheds that are managed by many different entities.

### Greater Monterey Integrated Regional Water Management Region

The Greater Monterey IRWM region encompasses the entirety of Monterey County except for the northernmost portion within the Pajaro River Watershed, the Carmel River Watershed, and the service area of the MPWMD. The region also includes a small portion of San Benito County. Water supply extracted via wells from groundwater basins for the Greater Monterey County IRWM region is entirely local, except for water within the Salinas River sourced from San Luis Obispo County to the south. Within the Greater Monterey IRWM region, water service is provided by numerous entities. MCWRA owns the Nacimiento and San Antonio dams, and also provides services related to water reclamation and monitoring.

With respect to the opportunity sites, as well as trends within the Greater Monterey IRWM region, land use development is concentrated in the Salinas River Valley. Water demand can be divided into two primary users: agricultural and urban (residential, commercial, institutional, industrial, landscaping). Urban areas within the Salinas River Valley include Salinas, Marina, Castroville, Soledad, King City, Greenfield, Chualar, and other areas. Since the early 1990s, MCWRA regularly monitors groundwater extraction in the Salinas Valley. In 2023, agricultural groundwater pumping in the Salinas River Valley totaled to an estimated 361,993 AF of water and urban groundwater pumped totaled to an estimated 37,250 AF (MCWRA 2024). This equates to agricultural land uses accounting for just over 90 percent of total groundwater use monitored by MCWRA in the Salinas River Valley. Within the urban areas, Salinas accounts for approximately 47 percent of urban groundwater pumping, with the next highest area, Marina, accounting for approximately 9.1 percent (MCWRA 2024).

### Monterey Peninsula Integrated Regional Water Management Region

The Monterey Peninsula, Carmel Bay, and South Monterey Bay (Monterey Peninsula) IRWM region encompasses approximately 350 square miles, including the six Monterey Peninsula Cities of Carmel-by the Sea, Del Rey Oaks, Pacific Grove, Monterey, Sand City, Seaside, and extends into portions of the UMC and inland areas. Approximately 255 square miles of the region is the Carmel River Watershed. (Monterey Peninsula RWMG 2019). As with other areas in Monterey County, the Monterey Peninsula IRWM region water supply is entirely locally sourced. MPWMD is the primary water management entity in the region; however, the water supply is conveyed and distributed by Cal-Am. Cal-Am owns and operates the water system for most of Carmel, all of Del Monte Forest, and much of Carmel Valley and Greater Monterey Peninsula Planning areas. The adjudicated Seaside Sub-basin is the source for much of the water that Cal-Am purveys throughout these areas of the County. Since 1995, Cal-Am has been under a cease-and-desist order from the State Water Resources Control Board to reduce pumping of the Carmel River to the legally established levels. This has resulted in a moratorium on new service connections in the main Cal-Am service area. Since that time, Cal-Am has sought approval of its Monterey Peninsula Water Supply Project (MPWSP) that would consist of a desalination facility, a well field, water transmission pipelines, pump station, and other related infrastructure.

In 2022, the California Coastal Commission conditionally approved Cal-Am's proposed desalination plant in Marina. In August 2025, the CPUC approved the MPWSP and Cal-Am is underway with site preparations. However, the MPWSP is currently being litigated. Additionally, Cal-Am has worked with Monterey One Water and MPWMD for additional water supply from the Pure Water Monterey Groundwater Replenishment project and expansion project, which includes injecting water into the Seaside Groundwater Basin for use on the Monterey Peninsula. MPWMD has authority over water in the main service area of Cal-Am and reviews "water permit applications" based on available water credits for a property and a water fixture count for each water fixture on a property. New development in the Cal-Am service area must obtain a water permit from MPWMD before a building permit is issued.

In 2018, residents voted in favor of MPWMD buyout of Cal-Am infrastructure within its jurisdiction, if determined financially feasible. In 2023, MPWMD passed a resolution to initiate the buyout through eminent domain, which is still in progress within the judicial system. Opportunity Sites within the MPWMD service area are concentrated in the Carmel and Carmel Valley areas, with a few sites near Seaside and Fort Ord.

Water demand was estimated for the year 2020 by MPWMD to be 9,725 AF annually. This baseline was established to estimate the total future water demand (Year 2045) as part of MPWMD's 2022 Supply and Demand Forecast. Of this annual total, approximately 6,345 AF is attributed to residential demand and approximately 3,380 AF is from non-residential demand (MPWMD 2022). MPWMD has an estimated 11,468 AF of water available annually, sourced from

Pure Water Monterey, the Carmel River (Los Padres Reservoir), the Sand City desalination, and groundwater basins (MPWMD 2022). Pure Water Monterey is an advanced water recycling facility jointly developed with Monterey One Water and MPWMD. Depending on the level of treatment received, wastewater treated by Monterey One Water is either used for irrigation in Castroville as part of the Castroville Seawater Intrusion Project, discharged to the ocean, or pumped to the Pure Water Monterey (M1W 2024). Completed in 2025, the expanded Pure Water Monterey will provide the Monterey Peninsula with 60 percent of its potable water. MPWMD is also studying alternative projects for the Los Padres Dam, including storage expansion or possible dam removal. In 2022, the California Coastal Commission conditionally approved Cal-Am's proposed desalination plant in Marina. In August 2025, the CPUC approved the desalination plant (MPWSP) and Cal-Am is underway with site preparations.

### Pajaro River Watershed Integrated Regional Water Management Region

Relative to the rest of the watershed located in the Counties of Santa Cruz, Santa Clara, and San Benito, only a small portion is located in the northernmost end of Monterey County, where the watershed drains directly into Monterey Bay (Pajaro River Watershed RWMG 2019). The Pajaro Valley Water Management Agency (PV Water) is the primary water management agency for Pajaro and Las Lomas areas in which opportunity sites 48 through 51, and 64 are located. PV Water's jurisdictional boundary encompass the Pajaro Valley Groundwater Sub-basin and includes the City of Watsonville and extends into the Counties of Santa Cruz, San Benito, and Monterey. In 2022, total water use was estimated at 51,535 AF, with groundwater providing 48,054 AF (93.2 percent) and the remaining from recycled water and surface water (PV Water 2022). Over 80 percent of the water used in PV Water's service area is for agricultural uses. PV Water actively manages the groundwater in its jurisdiction and implements several projects to achieve sustainable groundwater levels, including, the College Lake Integrated Resources Management Project, the Watsonville Slough System Managed Aquifer Recharge Projects, and Recharge Net Metering (PV Water 2022). Additionally, PV Water, in partnership with the City of Watsonville, operates the Watsonville Area Water Recycling Facility, which provides about 6,000 AF of water per year to coastal agricultural lands (PV Water 2018).

### 4.18.2.2 Wastewater Treatment

Wastewater is treated by either on-site wastewater disposal systems (i.e., septic tanks) or through collection by wastewater conveyance systems to a treatment facility. The Monterey County Health Department is responsible for the permitting and inspection of septic systems and the monitoring the discharge of treated sewage effluent from wastewater treatment plants in compliance with Chapter 15.20 of the County Code (County of Monterey 2024a). Due to the importance of groundwater for Monterey County's water supply, the County requires new development to connect to a wastewater treatment facility unless that connection is infeasible. Two regional wastewater treatment facilities service the Monterey Peninsula area (as well as Salinas) and the Carmel Area; the City of Watsonville serves the Pajaro area and the northern extent of Monterey

County. Other communities and cities in the Salinas Valley are served by local wastewater treatment facilities (such as Chualar and Soledad). Figure 4.18-2, Major Wastewater Service Providers in Monterey County, illustrates major wastewater service providers in Monterey County; note that there are more wastewater service providers within Monterey County than shown on Figure 4.18-2.[3] However, many areas throughout Monterey County use septic systems if no public sewer system is available. Table 4.18-2, Opportunity Sites Within and Near Wastewater Service Provider Territories, summarizes wastewater service providers in relation to opportunity sites, based on available mapping data. Sites not located within existing service areas may require annexation to be served by the relevant wastewater service provider.

**Table 4.18-2. Opportunity Sites Within and Near Wastewater Service Provider Territories**

| Wastewater Service Provider | Service Area Description | Treatment Information | Opportunity Site(s) | County Plan Area |
|---|---|---|---|---|
| Monterey One Water (formerly the Monterey Regional Water Pollution Control Agency) | Receives wastewater from Boronda, Castroville, Del Rey Oaks, Marina Coast Water District, Monterey, Pacific Grove, Salinas, San City, Seaside, UMC | Capacity: 29.6 mgd<br><br>Use: 18 mgd | 1 through 6, 11 through 15, 24, 30, 31, 40, 41, 45, 46, 47, 52, and 53<br><br>Combined total of 3,185 units | Greater Salinas; Fort Ord; North County Inland; Carmel Area Land Use Plan; Carmel Valley Master Plan; Toro Area; Greater Monterey Peninsula |
| Carmel Area Wastewater District | Carmel, Carmel Valley, Carmel Highlands | Capacity: 3 mgd<br><br>Use: 1.1 mgd | 16 through 23, 35 through 38, 43, 54 through 56 (543 units) | Carmel Area, Carmel Valley |
| Castroville Community Services District | Castroville (feeds into Monterey One Water) | Refer to Monterey One Water | Refer to Monterey One Water | North County Inland |
| Little Bear Water Company | Pine Canyon | Capacity: 0.124 mgd<br><br>Use: at or near capacity | 42 (27 units) | Central Salinas Valley |
| Marina Coast Water District | Marina (feeds into Monterey One Water) | Refer to Monterey One Water | Refer to Monterey One Water | Greater Monterey Peninsula |
| San Lucas County Water District | San Lucas | Capacity: 0.034 mgd<br><br>Use: 0.019 mgd | 32 through 34 (24 units) | Central Salinas Valley |
| Seaside County Sanitation District | Seaside (feeds into Monterey One Water) | Refer to Monterey One Water | Refer to Monterey One Water | Greater Monterey Peninsula |
| N/A – on-site treatment systems | Prunedale | On-site wastewater treatment system (septic tank) | 8 through 10, 39, 44 (377 units) | North County Inland |

[3] See LAFCO website for more information: https://www.countyofmonterey.gov/government/government-links/lafco/studies-maps.

**Table 4.18-2. Opportunity Sites Within and Near Wastewater Service Provider Territories**

| Wastewater Service Provider | Service Area Description | Treatment Information | Opportunity Site(s) | County Plan Area |
|---|---|---|---|---|
| Pajaro County Sanitation District | Las Lomas | Wastewater is pumped to City of Watsonville Treatment Plant | 48,49, 50, 51, 64 (150 units) | North County Coastal |
| Chualar County Services District | Chualar | Capacity: 0.1 mgd<br><br>Use: at or near capacity | 25 through 29 (128 units) | Central Salinas Valley |

**Notes:** mgd = million gallons per day; UMC = Unincorporated Monterey County

As shown in Table 4.18-2, Monterey One Water (M1W) (formerly the Monterey Regional Water Pollution Control Agency), serves the largest area with several water districts and cities conveying wastewater to its treatment facilities, including Castroville Community Services District and Seaside County Sanitation District). M1W's Regional Treatment Plant (RTP) is located north of the City of Marina. The RTP has a capacity for primary, secondary, and tertiary treatment of 29.6 million gallons per day (mgd) and treats an average of 18 mgd (M1W 2024).

The Carmel Area Wastewater District collects and treats wastewater from Carmel, Carmel Valley, Carmel Highlands, and Pebble Beach Community Service District customers (CAWD 2024). CAWD operates its wastewater treatment plant that has a permitted capacity of 3 mgd and currently treats approximately 1.1 mgd; on average approximately 90 percent of wastewater influent is reclaimed and used to irrigate the Pebble Beach golf course (CAWD 2024).

The Pajaro County Sanitation District pumps wastewater to the City of Watsonville for treatment. The City of Watsonville operates a wastewater treatment facility that has a rated capacity of 12 mgd and currently treats approximately 5 mgd on average (City of Watsonville 2021).

The Little Bear Water Company provides wastewater services to the area of Pine Canyon. Its wastewater treatment permitted capacity is 124,000 gallons per day (0.124 mgd) and has remained in its current permitted capacity since 1986 (Central Coast RWQCB 2022). Some properties in this area also use septic systems. The Central Coast RWQCB is currently working with the Little Bear Water Company on enrolling into a new permit. Additionally, the City of King City has contemplated annexation of the Little Bear Water Company's wastewater service area into King City's service area as part of long-term planning efforts (City of King City 2017).

The San Lucas County Water District provides wastewater collection and treatment services to the San Lucas area. It has a treatment capacity of 34,000 gallons per day and treats 19,000 gallons per day on average (San Lucas County Water District 2024).

The area of Chualar is provided wastewater treatment services by the Chualar County Services District. Its treatment facility has a capacity of 0.1 mgd and is operating at capacity (County of Monterey 2025). Additionally, in 2023, the wastewater treatment ponds were flooded and wastewater was trucked to Soledad (Central Coast RWQCB 2023). In early 2025, the County moved forward with evaluating options to upgrade Chualar County Service District facilities and connecting treatment conveyances to the City of Salinas for treatment by M1W (County of Monterey 2025).

The area of Prunedale is not currently served by a wastewater treatment provider. Instead, properties requiring wastewater treatment install septic systems.

#### 4.18.2.3 Stormwater Drainage

Site drainage and stormwater facilities vary across Monterey County and are site-specific. Urbanized areas of Monterey County typically have existing curb and gutter infrastructure feeding into larger stormwater capture systems. However, rural and semi-rural locations may not have such infrastructure. Stormwater capture is also an important component in groundwater basin recharge. Most of the project sites are adjacent to or near waterways, including the Carmel River (Sites 17–23, 35–38, 54, 56), the Salinas River and its tributaries (Sites 24–29, 31–34, 42, 47), Canyon Del Rey (Sites 46, 52, 60), Santa Rita Creek (Sites 1–4), Tembladero Slough (Sites 11–15, 30, 41), Pajaro River (Sites 49–51, 64). Refer to Section 4.10 for additional discussion.

#### 4.18.2.4 Electric Power

Monterey County is within the service territory of PG&E and Central Coast Community Energy (3CE). 3CE is a community choice aggregator exclusively responsible for electricity generation, investing in new resources, and managing supply and demand (3CE 2024). Within its service area, PG&E manages both electricity procurement, delivery infrastructure, and billings of customers. For 95 percent of the population of 3CE's territory, customers receive electricity procured by 3CE that is then delivered and billed by PG&E (3CE 2024). Customers have the ability to opt out of 3CE and would receive energy from PG&E. In 2022, Monterey County consumed approximately 2.49 billion kilowatt hours (kWh) of electricity, with residential energy use accounting for approximately 29 percent of the total (712 million kWh) and non-residential energy use account for approximately 71 percent (1.78 billion kWh) (CEC 2022).

#### 4.18.2.5 Natural Gas

Monterey County is within PG&E's natural gas service area. Major gas transmission pipelines extend into the populated areas of Monterey County and include: the Salinas River Valley along U.S. Route 101 (also known as Highway 101); State Route 68 from Salinas to Monterey; Carmel and into western Carmel Valley along State Route 1 (also known as Highway 1); coastal areas of Seaside, Sand City, and Marina; and across portions of northern Monterey County near Moss Landing, Castroville, and

Pajaro (PG&E 2024). The majority of opportunity sites are located in proximity of a major natural gas transmission line operated by PG&E.

### 4.18.2.6 Telecommunication

Mobile phone and broadband internet are available throughout Monterey County. According to the Federal Communications Commission, 4G LTE mobile phone data and voice coverage (AT&T, T-Mobile, and Verizon) extends throughout most populated areas of Monterey County, including the Salinas River Valley, the Monterey Peninsula, Carmel Valley, and northern Monterey County; intermittent coverage is available along the coast with most coverage available in the Big Sur area (FCC 2021). Similarly, broadband internet is generally available throughout Monterey County, but at various speeds. The highest broadband speeds are available in the more densely populated areas such as the cities and communities on the Monterey Peninsula and the City of Salinas (CPUC 2021). In July 2021, Governor Newsom signed into law Senate Bill 156 to create an open-access "middle-mile" network to bring high-speed broadband internet service to all of the state. "Middle-mile" is the physical fiber-optic infrastructure to provide connectivity over long distances. This would increase "last-mile" connections to local users in a given community. The proposed statewide middle-mile network would extend through the Salinas River Valley and areas of northern Monterey County, with approximately 22 miles in pre-construction and 130 miles in process of installation (CDT 2024).

### 4.18.2.7 Solid Waste

Monterey County's waste is served by four entities: ReGen Monterey (formerly known as the Monterey Regional Waste Management District), the Salinas Valley Solid Waste Authority, Waste Management, and Republic Services. Landfills and waste transfer facilities within Monterey County are summarized in Table 4.18-3, Solid Waste Service Providers and Facilities in Monterey County.

**Table 4.18-3. Solid Waste Service Providers and Facilities in Monterey County**

| Solid Waste Service Provider | Facility | Facility Address | Facility Information |
|---|---|---|---|
| ReGen Monterey | Monterey Peninsula Landfill | 14201 Del Monte Boulevard<br>Marina, California 93933 | Maximum permitted capacity: 49.7 million cubic yards<br>Remaining Capacity: 48.7 million cubic yards<br>Maximum permitted throughput: 3,500 tons per day<br>Estimated cease operation date: 2/28/2107 |
| | Materials Recovery Facility | 14201 Del Monte Boulevard<br>Marina, California 93933 | Diverts recyclable and reusable materials from the Monterey Peninsula Landfill |

**Table 4.18-3. Solid Waste Service Providers and Facilities in Monterey County**

| Solid Waste Service Provider | Facility | Facility Address | Facility Information |
|---|---|---|---|
| Salinas Valley Solid Waste Authority | Johnson Canyon Landfill | 31400 Johnson Canyon Road<br>Gonzales, California 93926 | Maximum permitted capacity: 18.5 million cubic yards<br>Remaining capacity: 12.6 million cubic yards<br>Maximum permitted throughput: 1,694 tons per day<br>Estimated cease operation date: 12/31/2066 |
| | Sun Street Transfer Station | 139 Sun Street<br>Salinas, California 93901 | Accepts household hazardous waste |
| | Jolon Road Transfer Station | 52654 Jolon Road<br>King City, California 93930 | Maximum daily throughput: 135 tons |
| Waste Management | Bradley Transfer Station | Off El Camino-Bradley Road<br>Bradley, California 93426 | Maximum daily throughput: 60 tons |
| | Carmel Valley Transfer Station | 9 Pilot Road<br>Carmel Valley, California 93924 | Maximum daily throughput: 90 tons |
| | San Ardo Transfer Station | Cattleman Road<br>San Ardo, California 93450 | Only open to residential customers living in San Ardo |
| Republic Services | Post Collection Facility | 1120 Madison Lane<br>Salinas, California 93907 | Maximum daily throughput: 900 tons |

**Sources:** CalRecycle 2024; County of Monterey 2024b.

## 4.18.3 Method of Analysis

The analysis contained herein addresses potential utilities and service systems issues from a programmatic-level and countywide approach, recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC will be facilitated by the HEU6 through identification and rezoning to encourage residential development. Where appropriate the analysis uses a quantitative approach that evaluation a conservative estimate of utility demand based on buildout of the reasonable development capacity. Individual projects will undergo project-specific review at the time of each development application. Where appropriate, individual project sites are discussed.

## 4.18.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on utilities and service systems if it would:

- **Threshold 1:** Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

- **Threshold 2:** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- **Threshold 3:** Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- **Threshold 4:** Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- **Threshold 5:** Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

## 4.18.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to utilities and service systems that could result from implementation of the project.

### 4.18.5.1 Threshold 1: New or Expanded Utilities Facilities

**Threshold 1:** Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

#### Impact Analysis

Refer to Section 4.10 for a discussion regarding stormwater drainage, and Section 4.6 for additional discussion related to electricity and natural gas.

##### *Water*

Future housing development facilitated by the project would incrementally increase water service demands in Monterey County. While the project would not directly construct new housing, it would enable increased density within opportunity sites and support the development of residential units. Much of the UMC is served by private individual water wells, local and state small water systems (2–14 connections), or small public water systems (15–199 connections), with limited areas served by large public water systems (200 or more connections). Where public water service is available, infrastructure for new housing is limited and adds substantial costs for construction. Where opportunity sites are located in areas already served by a water utility, new or expanded facilities would likely be limited to on-site water systems and connections to existing water mains within adjacent roadways or easements. However, some opportunity sites are also located outside of existing water service provider boundaries. Depending on site and geographic conditions in relation to the nearest water service provider, development on these

opportunity sites may be subject to requirement to either provide on-site water systems or annex into an existing water service provider's service area and without annexation, lack of existing water systems to serve the development. Annexation into an existing water service provider's service area would require review and approval by the applicable water agency and the Local Agency Formation Commission (LAFCO) of Monterey County.

Where possible, the County encourages connection of new development to existing water utility services as the larger systems have better technical and financial resources to manage a water system than do individual small systems that are often managed by homeowners. Consistent with 2010 General Plan Policies PS-1.1, PS-1.3, PS-1.6, PS-3.1, Carmel Land Use Plan Policies 3.2.2 and 3.2.3, North County Land Use Plan Policies 2.5.1, 2.5.2 and 2.5.3, and implemented by Title 15 – Public Services and Title 20 – Coastal Implementation Plan, of the County Code, all discretionary projects will only be approved if it is proven that APFS exist or will be provided concurrent with development and that adequate long-term water supplies exist to serve the development.

Existing 2010 General Plan policies ensure that water services for new residential development requiring discretionary approval meet or exceed the "Infrastructure and Service Standards" outlined in Table PS-1 of the 2010 General Plan. Additionally, HEU6 includes Programs H-2.L, Collaboration with Water Resources Agencies, H-2.Q, Ensure Adequate Water and Sewer Resources for New Housing Development, and Policy H-2.12, Assist in infrastructure and public facility improvements that support existing and new affordable housing, to address development constraints related to water. The discretionary application process for each development project will verify that adequate water services and facilities are available or can be provided. No discretionary development project will be approved without specific findings, supported by evidence, that confirm the availability of a long-term, sustainable water supply, both in quality and quantity, to serve the development. If required, discretionary review will also allow for annexation review and approval into an existing water service provider area by LAFCO of Monterey County. Despite the County's development review process requiring assurance for adequate public utilities, impacts related to new or expanded water facilities resulting from discretionary projects would be potentially significant.

Residential projects that would qualify for streamlining under the Objective Process would be processed objectively, meaning these projects may not undergo subsequent environmental review or be evaluated for APFS and adequate long-term water supplies to serve the development. As such, impacts related to water resulting from projects that qualify for streamlining under the Objective Process would be potentially significant. Under Mitigation Measure (MM-) UTL-OBJ-1, all projects that qualify for streamlining under the Objective Process must submit proof of a long-term sustainable water supply through an on-site water system or an adequate water supply system from an existing water service provider having jurisdiction. If neither of those are an option,

a project may require annexation into a water service provider service area. Annexation is a discretionary process, any project requiring formal annexation into a water service provider service territory would require approval by LAFCO.

### *Wastewater*

Future housing development facilitated by the project would incrementally increase wastewater generation in Monterey County. While the project would not directly construct new housing, it would allow for increased density within opportunity sites and support the development of residential units. Unless otherwise proven to be infeasible, the County discourages the installation of new septic systems in conjunction with new development. Should septic be the only option for wastewater treatment, the County enforces strict requirements for adequate sizing, design, and maintenance of new septic systems through the County's Local Agency Management Program for On-Site Wastewater Treatment Systems (LAMP). The LAMP establishes standards for all new, replacement and expansion on-site wastewater treatment systems and for on-site wastewater treatment system demolition within UMC. Limitations of the LAMP for developing or expanding residential on-site wastewater treatment systems include restricted depth of dispersal fields, restriction on the use of seepage pits, and more comprehensive site evaluation requirements such as groundwater monitoring borings, soil profile analysis for new systems, and percolation testing.

Consistent with 2010 General Plan Policies PS-1.1, PS-1.3, and PS-1.6, Carmel Area Land Use Plan Policies 3.2.2, 3.2.3, North County Land Use Plan Policies 2.5.1, 2.5.2, and 2.5.3 and implemented by Title 15 – Public Services and Titel 20 – Coastal Implementation Plan, of the County Code, projects will only be approved if it is proven that APFS, including wastewater services, exist or will be provided concurrent with development. The County Code, Chapter 15.20 – Sewage Disposal, regulates connections to public sewer systems and on-site wastewater treatment systems (septic tanks). It requires new wastewater generating development to be connected to an approved sanitary sewer when a sewer main is located within 300 feet of the structure and when parcel abuts the road, street, or alley where the sewer main is located. General Plan policies require that wastewater services for new residential development meet or exceed the "Infrastructure and Service Standards" outlined in Table PS-1 of the General Plan. The HEU6 Housing Programs H-2.Q, Ensure Adequate Water and Sewer Resources for New Housing Development, and Policy H-2.12, Assist in infrastructure and public facility improvements that support existing and new affordable housing, to address development constraints related to wastewater.

Construction of new on-site septic system is not permitted for development within existing service area of a regional or subregional wastewater collection and treatment system. As described in Table 4.18-2, not all opportunity sites are within existing service area of a regional or subregional wastewater service area. Where public collection and treatment system exist in the area, annexation to existing service area is preferred method of service, each development project would be required to reviewed upon development application process to verify that adequate wastewater services and

facilities are available or can be provided. Despite the County's development review process, impacts related to new or expanded wastewater facilities resulting from projects would be potentially significant.

Qualifying projects under the HEU6 may be able to be processed objectively without being subject to future environmental review under CEQA. As such, they would not be subject to the review process requiring proof that APFS exist. Impacts related to new or expanded wastewater facilities resulting from projects that qualify for streamlining under the Objective Process would be potentially significant. Under MM-UTL-OBJ-1, all Objective Process projects must submit proof of a APFS for wastewater through an on-site wastewater system or an adequate wastewater system from an existing wastewater service provider that has jurisdiction. If neither of those are an option, a project may require annexation into a wastewater service provider service area. Annexation is a discretionary process, any project requiring formal annexation into a water service provider service territory would require approval by LAFCO.

#### *Electric Power*

Future development facilitated by the HEU6 would increase demand for electricity. Each new development would require connection to PG&E infrastructure in accordance with its regulations and design requirements. Each opportunity site is located in an area already serviced by PG&E electrical transmission lines and abuts a roadway with existing transmission lines. As a future project comes forward for development, it would be required to connect these existing transmission facilities through minor project-serving electrical facilities. These new connections would be subject to design review by PG&E and the County. In addition to PG&E requirements, Chapter 15.32 – Underground Utility Facilities, of the County Code would require underground utility connections wherever feasible. Therefore, there exists adequate electrical facilities to serve each opportunity site and any new or expanded electrical facilities would be limited to project-specific connections to PG&E infrastructure. Impacts related to electrical facilities would be less than significant.

#### *Natural Gas*

Future development facilitated by the HEU6 would increase demand for natural gas, primarily for heating, water heating, and cooking. As discussed in Section 4.18.2.5, the majority of project sites within the HEU6 are located in proximity of a regional natural gas transmission line operated by PG&E. Similar to electric power, each project site located near existing natural gas lines would be able to connect for gas service subject to PG&E and County requirements. Any future connections would be minor project-serving natural gas lines. For sites where existing gas lines are not available, it is likely that the future development would wholly rely on electric power for heating and cooking needs. This would be consistent with state building code requirements moving to decrease reliance on natural gas in new development. Sites located near existing natural gas may

opt to design for an all-electric development, dependent on feasibility and future code requirements. Therefore, there exists adequate natural gas facilities to serve nearby project sites and any new or expanded natural gas lines would be limited to project-specific connections to PG&E infrastructure. Impacts related to natural gas facilities would be less than significant.

#### *Telecommunications*

Development under the HEU6 would increase demand for telecommunications services. As discussed above in Section 4.18.2.6, mobile phone and broadband internet are available throughout Monterey County. As each individual opportunity site is located proximate to existing development or urbanized areas, it is not anticipated that new telecommunication facilities would be required to provide services. The "middle-mile" network is currently under construction through Monterey County under a separate initiative. Future development in areas where only slower speeds exist would be able to connect to this new broadband internet network. Any connections for telecommunications would be project-specific and small in nature, likely to be located underground within existing developed roadways, alleys, or sidewalks. Any new or expanded telecommunication facilities would be limited to project-specific connections to existing infrastructure. Chapter 15.32 – Underground Utility Facilities, of the County Code, applies to underground utility distribution facilities for communication. Impacts related to telecommunication facilities would be less than significant.

### Significance of Impact

Less than significant impact for electric power, natural gas, and telecommunications.

Potentially significant impact for water and wastewater.

### Mitigation Measures

Preparation and submittal of proof of adequate water and wastewater facilities will be required for all projects processing under the HEU6 through MM-UTL-OBJ-1 and MM-UTL-CONS-2.

**MM-UTL-OBJ-1:** For by-right development the County shall include MM-UTL-OBJ-1 in the by-right housing ordinance.

1. Sites that are located in and able to be serviced by Public Water and/or Public Sewer District.
    a. Applications for multi-family housing projects that are subject solely to objective review and approval and/or objective standards according to state housing law shall be served by public water and wastewater (sewer) districts or agencies, if such service is available and consistent with the County's zoning ordinances (Title 20 and 21), General Plan and Local Coastal Program, as well as the CFC and the California Plumbing Code.

b. The applicant shall provide documentation from the appropriate public water and wastewater districts or agencies demonstrating that adequate water and wastewater services are available to serve the project; this includes water supply, system pressure, and service infrastructure, as well as wastewater conveyance and treatment capacity. Documentation at a minimum should include a quantitative comparison of existing versus proposed water and wastewater usage use and evidence from the water or wastewater service provided stating that adequate service and supply is available.
c. The documentation shall also identify any required service extensions or improvements required to adequately service the project, such as sewer laterals, and main connections adequately sized to convey project wastewater flows, or water mains designed and sized to provide adequate flows and pressure to serve the project's general water demands and fire flows (i.e., pumps), considering the proposed project density.
d. Documentation from the appropriate public water and wastewater districts or agencies shall be obtained by the applicant and submitted as part of project application materials. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the future proposed project.

2. Sites that require on-site wastewater treatment and/or on-site water systems.
   e. For applications for multi-family housing projects that are subject solely to objective review and approval and/or objective standards according to state housing law that are unable to connect to public water and wastewater systems, the applicant shall provide documentation that on-site septic infrastructure and/or on-site wells are adequately sized and available to serve the project and are consistent with the County's regulations for on-site wells and wastewater improvements. These improvements shall also be consistent with the CFC and the California Plumbing Code. The applicant shall provide documentation to the County as required by County Code Chapter 15.08 – Water Wells and Chapter 15.20.005 – Sewage Disposal and other applicable County regulations.
   f. Documentation shall be provided by the applicant and submitted as part of project application materials. The applicant shall assume full responsibility for costs incurred for necessary improvements that are required because of the future proposed project.
   g. Proof, as supported by evidence, shall be provided that there is a long-term sustainable water supply and adequate water supply system to serve the development. Evidence may include authorized production capacity, source of water supply and nature of water right(s); existing and projected future demand for water and water quality.

h. Proof, supported by evidence, shall be provided that there is a long-term, adequate capacity for wastewater treatment and disposal to serve the development. Evidence may include authorized treatment capacity and existing and projected future demand for wastewater treatment.

3. Sites that require annexation into a water and/or wastewater service district.
   i. For applications for multi-family housing projects that are not located in an existing service district area to connect to public water and wastewater systems nor can provide adequately sized on-site wastewater and water wells require annexation into a service district, authorized by the Local Agency Formation Commission (LAFCO).
   j. Projects that require annexation into a water and/or wastewater service district area would require a discretionary decision and review from LAFCO.

**MM-UTL-CONS-2:** For developments streamlining under the Consistency Process:

1. Sites that are located in and able to be serviced by Public Water and/or Public Sewer District.
   a. Applications for developments streamlining under the Consistency Process shall be served by public water and wastewater (sewer) districts or agencies, if such service is available and consistent with the County's zoning ordinances (Title 20 and 21), General Plan and Local Coastal Program, as well as the CFC and the California Plumbing Code.
   b. The applicant shall provide documentation from the appropriate public water and wastewater districts or agencies demonstrating that adequate water and wastewater services are available to serve the project; this includes water supply, system pressure, and service infrastructure, as well as wastewater conveyance and treatment capacity. Documentation at a minimum should include a quantitative comparison of existing versus proposed water and wastewater usage use and evidence from the water or wastewater service provided stating that adequate service and supply is available.
   c. The documentation shall also identify any required service extensions or improvements required to adequately service the project, such as sewer laterals, and main connections adequately sized to convey project wastewater flows, or water mains designed and sized to provide adequate flows and pressure to serve the project's general water demands and fire flows (i.e., pumps), considering the proposed project density.
   d. Documentation from the appropriate public water and wastewater districts or agencies shall be obtained by the applicant and submitted as part of project application materials. The applicant shall assume full responsibility for costs

incurred in service extensions or improvements that are required as a result of the future proposed project.

2. Sites require on-site wastewater treatment and/or on-site water systems.
    e. For applications for developments streamlining under the Consistency Process that are unable to connect to public water and wastewater systems, the applicant shall provide documentation that on-site septic infrastructure and/or on-site wells are adequately sized and available to serve the project and are consistent with the County's regulations for on-site wells and wastewater improvements. These improvements shall also be consistent with the CFC and the California Plumbing Code. The applicant shall provide documentation to the County as required by County Code Chapter 15.08 – Water Wells and Chapter 15.20.005 – Sewage Disposal and other applicable County regulations.
    f. Documentation shall be provided by the applicant and submitted as part of project application materials. The applicant shall assume full responsibility for costs incurred for necessary improvements that are required because of the future proposed project.
    g. Proof, as supported by evidence, shall be provided that there is a long-term sustainable water supply and adequate water supply system to serve the development. Evidence may include authorized production capacity, source of water supply and nature of water right(s); existing and projected future demand for water and water quality.
    h. Proof, supported by evidence, shall be provided that there is a long-term, adequate capacity for wastewater treatment and disposal to serve the development. Evidence may include authorized treatment capacity and existing and projected future demand for wastewater treatment.
3. Sites that require annexation into a water and/or wastewater service district.
    i. For applications for developments streamlining under the Consistency Process that are not located in an existing service district area to connect to public water and wastewater systems nor can provide adequately sized on-site wastewater and water wells require annexation into a service district, authorized by the Local Agency Formation Commission (LAFCO).
    j. Projects that require annexation into a water and/or wastewater service district area would require a discretionary decision and review from LAFCO.

## Significance of Impact After Mitigation

Even with implementation of MM-UTL-OBJ-1 and MM-UTL-CONS-2 impacts related to new or expanded water and wastewater facilities resulting from the project would remain significant and unavoidable.

### 4.18.5.2 Threshold 2: Water Supply Availability

**Threshold 2:** Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

## Impact Analysis

Construction of future development facilitated by the HEU6 would result in a temporary increase in water use by workers, equipment, and for dust control. Given the temporary nature of construction water use, this discussion focuses on the long-term increase in water demand and its effect on water supply and facilities.

Operation of residential land uses facilitated by the HEU6 would result in the permanent increase in water demand in the long-term from daily water use for cooking, cleaning, and irrigation. Urban water suppliers provide monthly reports to the State Water Resources Control Board, including residential gallons per capita per day. In Monterey County, the average residential gallons per capita per day in 2024 is 65; when averaged over the past 5 years, Monterey County uses 72 gallons per capita per day in the residential sector (SWRCB 2024). According to the Association of Monterey Bay Area Governments (AMBAG) 2022 Regional Growth Forecast, the average household size in UMC was 3.04 people and was forecasted to remain at 3.04 in 2025 (AMBAG 2020). Using a total residential unit amount of 4,434, the average household size of 3.04, and the average per capita per day residential water consumption of 72 gallons, buildout of the HEU6 would result in an additional 0.97 million gallons of water use per day. This equates to approximately 2.98 AF per day, or 1,087 AF per year of water.

Future development would be spread throughout UMC and each individual project would rely on one of the many water service providers and water supplies available in the region. Breaking down the opportunity sites capacities by IRWM region, there are 3,328 units in Greater Monterey, 1,020 units in Monterey Peninsula, and 86 units in the Pajaro River Watershed. This breakdown splits the total estimated 1,087 AF per year into: approximately 816 AF per year in Greater Monterey (California Water Service Company, Castroville Community Services District, Little Bear Water Company, Marina Coast Water District, San Lucas County Water District); 250 AF per year in Monterey Peninsula (Cal-Am); and 21 AF per year in the Pajaro River Watershed (PV Water). These numbers represent a conservative increase in water use as many sites are currently not vacant with some level of existing water use present.

As described in Section 4.18.2.2, water pumped for agricultural uses in the Greater Monterey region accounted for approximately 90 percent of total groundwater pumped for the region at 361,993 AF, and all urban land uses (residential, commercial, institutional, industrial, landscaping) accounted for the remaining 10 percent at 37,250 AF in 2023. Therefore, project buildout demand of 816 AF per year in the Greater Monterey region would account for approximately 2.2 percent of estimated urban groundwater and approximately 0.2 percent of total groundwater pumping using 2023 estimates.

Within PV Water's service area (Pajaro River Watershed region), project buildout water demand of 21 AF per year would account for approximately 0.0004 percent of total water use using 2022 estimates where total water use was estimated at 51,535 AF. Similar to the Greater Monterey region where agricultural use accounted for approximately 90 percent of the total water use, agricultural land is by far the greatest user of water in the PV Water's service area, accounting for approximately 80 percent of total water use. As such, in the Greater Monterey and Pajaro Watershed regions, an increase in residential water demand due to the project buildout would be minor and represent a fraction compared to total water usage in these regions. Some of the opportunity sites are current agricultural lands, and converting these areas to residential uses would decrease water demands for agricultural use.

In contrast, Cal-Am's service area and MPWMD's jurisdiction is more urbanized, composed of several coastal cities. Approximately 23 percent (1,020 units) of the total opportunity sites are located within this region. According to MPWMD's 2022 Supply and Demand Forecast, water demand is estimated for the year 2020 by MPWMD to be 9,725 AF annually (approximately 6,345 AF for residential demand and approximately 3,380 AF for non-residential demand), with supply estimated at 11,468 AF annually, resulting in a difference of 1,743 AF annually (accounting for the expansion of Pure Water Monterey) (MPWMD 2022). Within the service area of MPWMD, project buildout would account for 4 percent of estimated residential demand, using 2020 estimates. MPWMD assessed long-term water supply and demand using, in part, AMBAG's 2022 Regional Growth Forecast, which reflects the Sixth Cycle Regional Housing Needs Allocation for the area. MPWMD determined that even with 200 percent of the growth forecasted by AMBAG, water supplies would be available for over 30 years (MPWMD 2022). Therefore, the increase in water demand attributed to buildout of the HEU6 is accounted for in MPWMD's long-term and conservative supply planning.

Under the HEU6 there is planned capacity for 150 units in the Pajaro Valley Groundwater Sub-basin. Major water supply and quality issues in the Pajaro Valley include sub-basin overdraft; contaminated or poor groundwater quality throughout the watershed; sediment and nutrient in surface water throughout the watershed; and seawater intrusion and nitrate contamination in the Pajaro/Sunny Mesa Community Service area.

The Salinas Valley Groundwater Basin is the source for much of the water throughout the County. Sub-basins include 180/400 Sub-basin, Eastside Sub-basin, Forebay Sub-basin, Langley Sub-basin, Monterey Sub-basin, and Upper Valley Sub-basin. Each sub-basin has some groundwater in storage, but in certain sub-basins groundwater use has exceeded the rate of recharge which leads to overdraft. The 180/400 Sub-basin has been designated as a critically over drafted sub-basin. Overdraft conditions also exist within the Monterey Sub-basin, the Langley Sub-basin, and the Eastside Sub-basin. Under the HEU6 there is planned capacity for: 339 units in the 180/400 sub-basin; 867 units in the Eastside Sub-basin; 250 units in the Langley Sub-basin; 805 units in the Monterey Sub-basin; 51 units in the Upper Valley Sub-basin; and no units in the Forebay sub-

basin. Major water supply and quality issues in the Salina Valley include seawater intrusion, water allocation, sub-basin overdraft, and groundwater contamination.

The largest water service provider within the Monterey Peninsula Areas is California American Water Company (Cal-Am). Cal-Am owns and operates the water system for most of Carmel, all of Del Monte Forest, and much of Carmel Valley and Greater Monterey Peninsula Planning areas. The adjudicated Seaside Sub-basin is the source for much of the water that Cal-Am purveys throughout these areas of the County. Since 1995, Cal-Am has been under a cease-and-desist order from the State Water Resources Control Board to reduce pumping of the Carmel River to the legally established levels. This has resulted in a moratorium on new service connections in the main Cal-Am service area. In anticipation of the completion of an expansion to the Pure Water Monterey project and the projected benefits of this project to provide additional supplies of groundwater recharge, MPWMD has approved new allocations of water to local jurisdictions within the MPWMD area. The County was allocated 72 AF of water in 2025, adding to the approximately 10 AF that the County already had from historical allocations. This allocation of water cannot be used for new lots of record requiring a water meter in the Monterey Peninsula due to the cease-and-desist order in place. Additional allocations may be available in the near future depending on the outcome of the Pure Water Monterey expansion project. Assuming a conservative 0.20 AF of water per unit for future development, approximately 82 AF of water would not be sufficient to accommodate the planned capacity within the MPWMD area even if the cease-and-desist order is lifted or modified. Under the HEU6 there is planned capacity for 468 units in the Carmel Valley Alluvial Basin and 877 units in the adjudicated Seaside Basin.

Under MM-UTL-OBJ-1, the County is required to incorporate requirements in the by-right housing ordinance for all projects to submit proof of a long-term sustainable water supply through an on-site water system or an adequate water supply system from an existing water service provider having jurisdiction. If neither of those are an option, a project may require annexation into a water service provider service area. Annexation is a discretionary process, any project requiring formal annexation into a water service provider service territory would require approval by LAFCO. Additionally, to address water constraints and accommodate growth in the area, the HEU6 includes Program H-2.L. Collaboration with Water Resources Agencies, Program H-2.Q. Ensure Adequate Sewer Resources for New Housing Development, and Policy H-2.12 Assist in infrastructure and public facility improvements that support existing and new affordable housing. These Programs/Policies require the County coordinate with water service providers and suppliers on projects and policies to achieve sub-basin sustainability and water allocations to accommodate future growth. Given the historical and ongoing constraints on water supply throughout Monterey County, even with HEU6 program and policy implementation, impacts related to water supply would be potentially significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-UTL-OBJ-1 and MM-UTL-CONS-2 identified above.

### Significance of Impact After Mitigation

Even with implementation of mitigation measures and HEU6 Programs and policies, impacts related to water supply would remain significant and unavoidable.

#### 4.18.5.3 Threshold 3: Wastewater Treatment Capacity

**Threshold 3:** Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

### Impact Analysis

In concert with an increase demand for water, the project would result in a similar increase in wastewater generation from residential uses including cooking, cleaning, and bathing. Water use can be used as a conservative estimate for wastewater generation, although in reality there would be less wastewater generated compared to water used. Project buildout would potentially result in an increase of water use by 0.97 million gallons per day (mgd).

Sites 8 through 10, 39, and 44 (377 units) are located in Prunedale where no wastewater service provider currently exists. These units are anticipated to require on-site septic systems for wastewater treatment. Future development in this location would be subject to the County Code regarding the siting, sizing, and design for on-site septic systems.

As discussed in Section 4.18.2.2, M1W, CAWD, Pajaro County Sanitation District (pumped to the City of Watsonville), and San Lucas County Water District have an estimated remaining average treatment capacity of 11.6 mgd, 1.9 mgd, 7 mgd, and 15,000 gpd at each treatment facility, respectively. Therefore, sufficient treatment capacity exists for opportunity sites (Sites 1 through 6, 11 through 24, 30 through 38, 41, 43, 46 through 56, and 64) located within these service areas.

Site 42 (27 units) is located in the Pine Canyon area which is served by the Little Bear Water Company. Sites 25 through 29 (128 units) are located in Chualar and would be serviced by the Chualar County Services Area No. 75. As discussed in Section 4.18.2.2, additional wastewater treatment capacity does not exist in these locations. Although treatment capacity does not currently exist, several long-term planning and evaluation efforts are underway to address wastewater treatment. As discussed previously, the Pine Canyon area may be annexed into the wastewater

service area of the King City; however, such annexation is only contemplated at this time and is beyond King City's planning horizon. Similarly, the County is currently underway with evaluating upgrades to Chualar's wastewater treatment facility or connecting to M1W.

Consistent with General Plan Policies PS-1.1, PS-1.3, and PS-1.6, Carmel Area Land Use Plan Policies 3.3.2 and 3.2.3, North County Land Use Plan 3.2.1, 3.2.2, and 3.2.3 and implemented by Title 15 – Public Services and Title 20 – Coastal Implementation Plans, of the County Code, projects will only be approved if it is proven that APFS, including wastewater services, exist or will be provided concurrent with development. The County Code, Chapter 15.20 – Sewage Disposal, requires new wastewater generating development to be connected to an approved sanitary sewer when a sewer main is located within 300 feet of the structure and when parcel abuts the road, street, or alley where the sewer main is located. General Plan policies require that wastewater services for new residential development meet or exceed the "Infrastructure and Service Standards" outlined in Table PS-1 of the General Plan. Construction of new on-site septic system is not permitted for development within existing service area of a regional or subregional wastewater collection and treatment system. As described in Table 4.18-2, not all opportunity sites are within existing service area of a regional or subregional wastewater service area. Where public collection and treatment system exist in the area, annexation to existing service area is preferred method of service, each development project would be required to be reviewed upon development application process to verify that adequate wastewater services and facilities are available or can be provided.

The HEU6 includes commitments to ensure adequate sewer capacity for affordable housing developments implemented under the project. This includes Program H-2.Q. Ensure Adequate Water and Sewer Resources for New Housing Development. Under Program H-2.Q, the County will prioritize sewer service for affordable housing developments and work with sewer providers to address provision of adequate sewer capacity.

Under MM-UTL-OBJ-1, the County is required to incorporate requirements in the by-right housing ordinance for all projects to submit proof of a APFS for wastewater through an on-site wastewater system or an adequate wastewater system from an existing wastewater service provider having jurisdiction. If neither of those are an option, a project may require annexation into a wastewater service provider service area. Annexation is a discretionary process, any project requiring formal annexation into a water service provider service territory would require approval by LAFCO.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

MM-UTL-OBJ-1 and MM-UTL-CONS-2 identified above.

### Significance of Impact After Mitigation

Even with implementation of mitigation measures and HEU6 Programs and policies, impacts related to wastewater treatment capacity would remain significant and unavoidable.

#### 4.18.5.4 Threshold 4: Solid Waste Generation and Threshold 5: Compliance with Solid Waste Regulations

**Threshold 4:** Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**Threshold 5:** Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

### Impact Analysis

Projects facilitated by the HEU6 would generate solid waste during both construction (temporary) and operation (permanent and long-term). Construction waste would be composed of excess materials, packaging and containers, demolished materials, worker refuse, and various general debris. During long-term operation, projects would generate regular, daily solid waste typical of residential land uses such as food and organic materials, general refuse (e.g., plastics, cardboard, waste from consumer products), and commercially available hazardous materials (e.g., paints, oils, fuels). As discussed in Section 4.18.7, Conclusion, the two primary landfills permitted by CalRecycle have estimated cease operation dates in the years 2066 and 2107 based on permitted throughput and remaining capacities. All future projects under the HEU6 would be served by these landfills and associated transfer facilities.

In compliance with CALGreen, the County requires all construction and demolition projects to divert at least 65 percent of debris and 100 percent of inert materials from landfills. Diversion of debris can include recycling or reuse of materials. The County enforces this diversion requirement through the approval process for finalized building permits and certificates of occupancy. It is difficult to reasonably estimate the potential amount of construction and demolition related debris that could be generated under the HEU6 because design and

construction details are not yet known at this time. However, compliance with County and CALGreen diversion requirements would minimize the amount of construction waste sent to landfills. Furthermore, consistent with General Plan Policies PS-1.1, PS-1.3, PS-1.4, and PS-1.6, Carmel Area Land Use Plan Policies 3.3.2 and 3.3.3, North County Land Use Plan Policies 3.2.1, 3.2.2 and 3.2.3, no discretionary application for new development would be approved unless the County finds that APFS exist or provided concurrent with the development. General Plan Policy PS-6.5 requires new development projects to conform to state-mandated diversion and recycling goals and site development plans to include adequate solid waste recycling collection areas. Future projects are also required to comply with the provisions of County Code related to solid waste diversion and recycling outlined Title 10 (Health and Safety) and associated requirements for appropriate waste facilities outlined in the Title 21 (Zoning) and Title 20 (Coastal Zoning).

CalRecycle provides a list of resources to estimate solid waste generation by sector; although waste generation rates can vary greatly across the state and due to project-specific circumstance, they are useful for planning purposes. Using the most conservative residential solid waste generation rate of 12.23 pounds per household per day and the anticipated 4,434 units identified within opportunity sites, full buildout of the HEU could produce upwards of 54,228 pounds per day (27.1 tons per day); this conservatively equates to 219 cubic yards of uncompacted mixed solid waste, or 78 cubic yards if compacted (CalRecycle 2019; USEPA 2016). As shown in Table 4.18-3, the Monterey Peninsula Landfill and Johnson Canyon Sanitary Landfill have a combined daily permitted throughput of 5,194 tons per day and combined estimated remaining capacity of 61.3 million cubic yards. In addition, ReGen Monterey's Materials Recovery Facility has continued to extend the capacity of the Monterey Peninsula Landfill through active sorting and diverting materials. The Materials Recovery Facility is capable of recovering up to 75 percent or more of materials from mixed waste, contributing toward state goals and requirements for waste diversion set by the Integrated Waste Management Act and subsequent amendments (ReGen Monterey 2024).

Based on the above, there is sufficient capacity for buildout of projects under the HEU6 during construction and operation. Future projects would also be required to comply with construction diversion mandates during permit application and issuance. Additionally, ongoing countywide programs (CALGreen/County diversion requirements) and facilities (Materials Recovery Facility) described above would continue contributing to state and County landfill diversion goals. Project implementation would not generate solid waste in excess of state or local standards, or in excess of local infrastructure's capacity or conflict with statutes and regulations related to solid waste. Therefore, impacts related to solid waste generation and requirements would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

## 4.18.6 Cumulative Impacts

### 4.18.6.1 Cumulative Thresholds 1 through 5: New or Expanded Utilities Facilities, Water Supply Availability, Wastewater Treatment Capacity, Solid Waste Generation, and Compliance with Solid Waste Regulations

This section addresses various potential cumulative impacts relating to utilities and service systems (i.e., water, wastewater, electric power, natural gas, telecommunication, and solid waste) that could result from implementation of the project. The cumulative setting for the project with respect to utilities include other long-range plans, policies, and programs implemented by the various agencies in Monterey County, as well as reasonably foreseeable development projects. Other land use jurisdictions within Monterey County also recently adopted or are in the process of developing their own Sixth Cycle Housing Element Update in compliance with the California Housing and Community Development Department. Similar to the project, these updates do not directly result in development; rather updates to Housing Elements often contain suites of rezones and identification of underutilized parcels where additional housing could be constructed.

The project would result in cumulatively considerable impacts if it, in combination with other past, present, and reasonably foreseeable plans, policies, programs, and projects would result in substantial adverse impacts related to new or expanded utilities (water, wastewater, electric power, natural gas, and telecommunication), water supply, wastewater capacity, or solid waste capacity. Although the project and other land use plans and programs do not directly result in an increase in demand for public utilities because they would not directly result in the construction of new housing, buildout of development facilitated by the project each cumulative regional plan would incrementally add to a cumulative effect on water supply and utility infrastructure at a regional level. The cumulative effect of regional growth and increases in demand for utilities would reduce the reliability or availability of water supplies, the capacity of water and wastewater conveyance and treatment infrastructure, and the capacity of regional landfill and waste recycling and transfer facilities, such that utilities may not be able to accommodate proposed and reasonably foreseeable cumulative development and regional growth. Managing long-term regional growth and the availability of utilities and water supply is an ongoing, multi-jurisdictional effort. Therefore, cumulative impacts on utilities and service systems would be significant and unavoidable.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

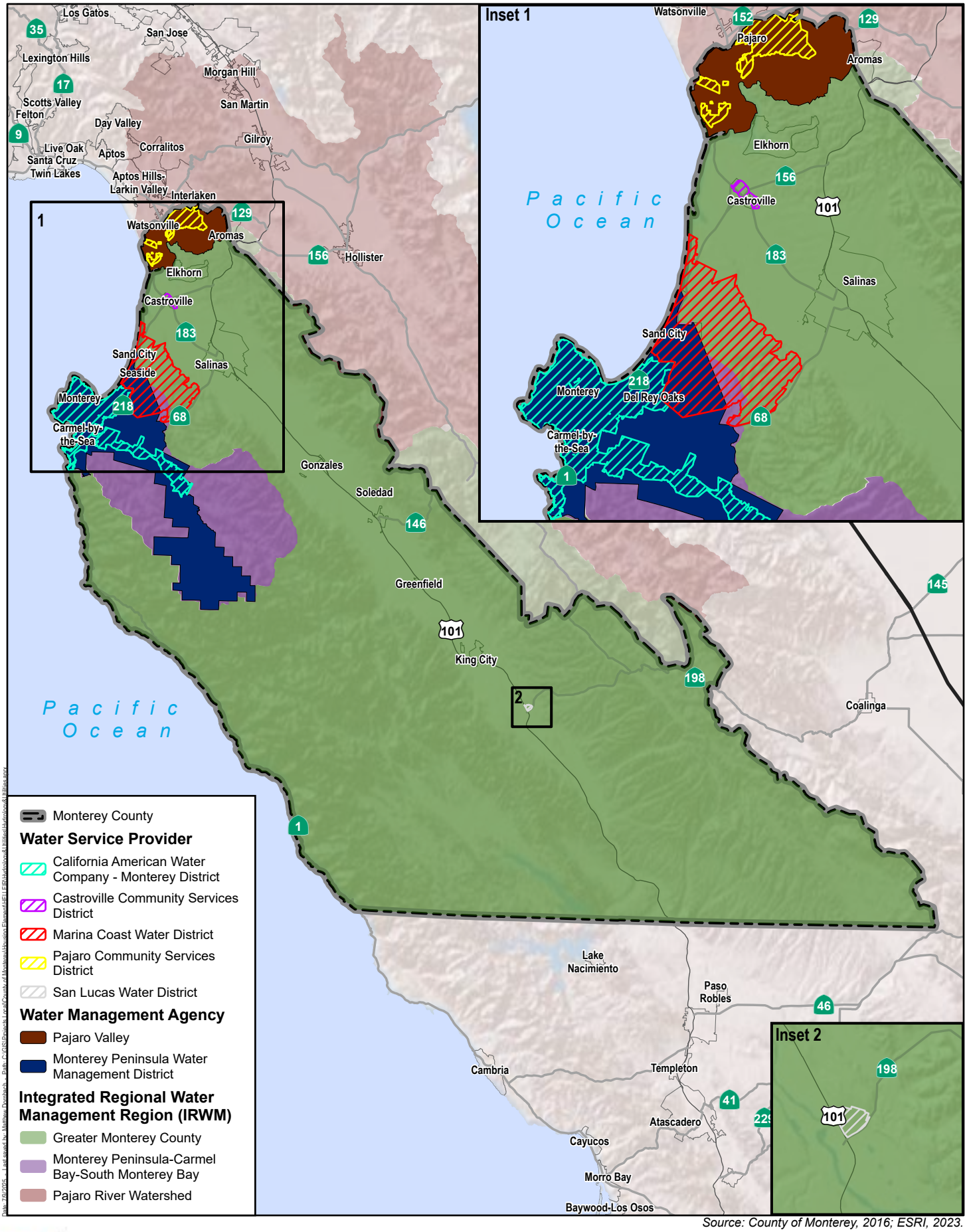
MM-UTL-OBJ-1 and MM-UTL-CONS-2 identified above.

### Significance of Impact After Mitigation

Even with implementation of mitigation measures and HEU6 Programs and policies, impacts related to wastewater treatment capacity would remain significant and unavoidable.

## 4.18.7 Conclusion

The project would result in less than significant impacts on new or expanded utilities facilities (electrical power, natural gas, and telecommunications) and solid waste generation. The project would result in significant and unavoidable impacts on new or expanded water and wastewater facilities, water supply, and wastewater treatment capacity. Additionally, when considered in combination with cumulative projects, impacts on utilities and service systems would be significant and unavoidable.




*Source: County of Monterey, 2016; ESRI, 2023.*

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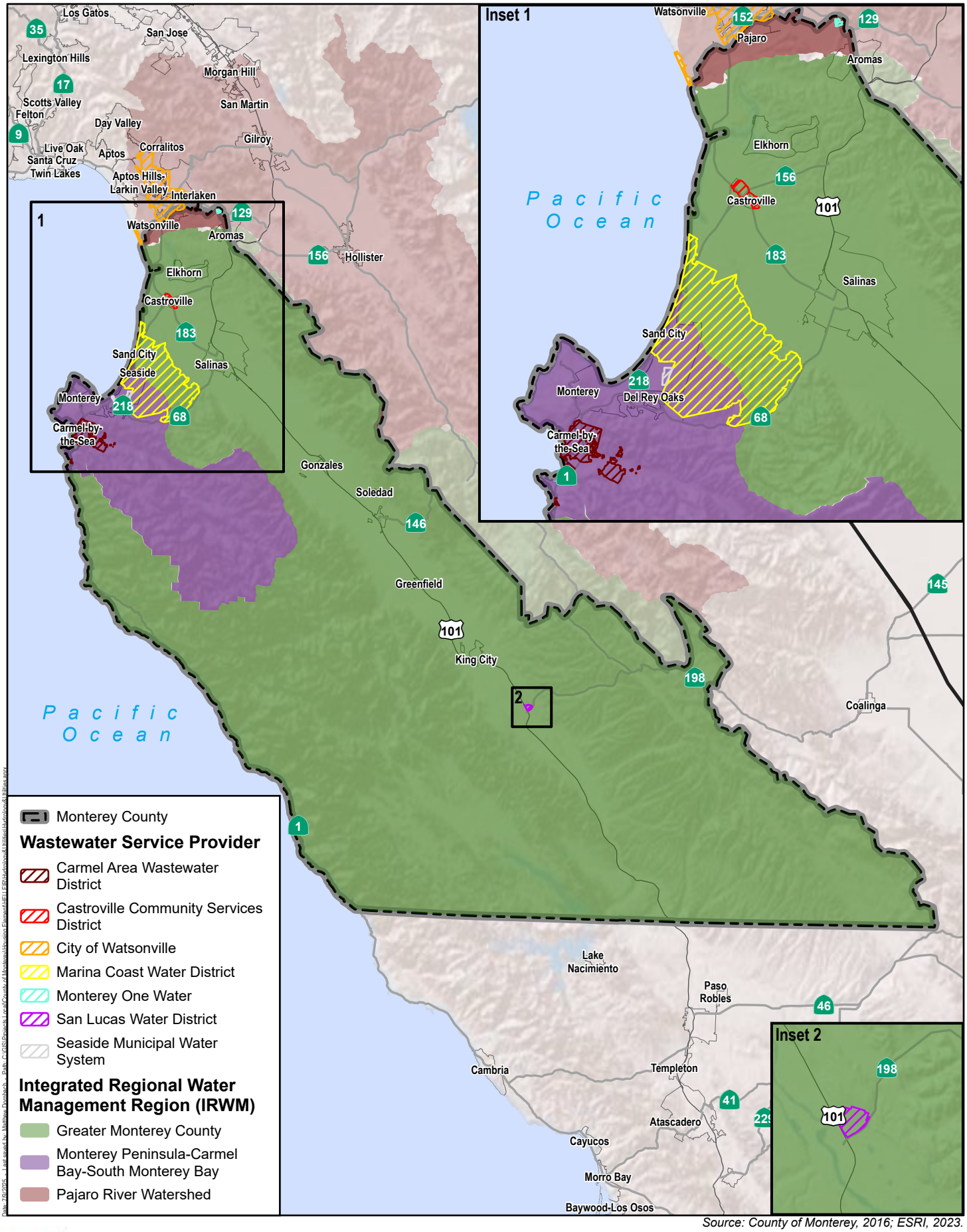
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**Figure 4.18-1**

Major Water Service Providers in Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey, 2016; ESRI, 2023.*

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**Figure 4.18-2**

Major Wastewater Service Providers in Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# 4.19 Wildfire

This section evaluates the potential for impacts related to wildfire resulting from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This analysis addresses potential impacts on implementation of an emergency response or evacuation plan, exposure to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, temporary or ongoing impacts on the environment from the installation or maintenance of associated infrastructure, and exposure of people or structures to significant post-wildfire risks, such as flooding or landslides.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 4.19.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address wildfire.

### 4.19.1.1 Federal

#### Disaster Mitigation Act of 2000: Senate Bill 743

The Disaster Mitigation Act of 2000 requires a state-level mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The act also established new requirements for local mitigation plans.

### National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts on communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

### International Building Code and International Fire Code

The International Building Code (IBC) and International Fire Code (IFC) are model codes developed by the International Code Council to regulate fire safety in buildings. The IBC focuses on building design and construction, while the IFC addresses fire prevention, fire protection, and life safety in both new and existing buildings. Both codes work together to safeguard life and property from fire and explosion hazards.

## 4.19.1.2 State

### California Office of Emergency Services

Under the California Emergency Services Act, the State of California developed an emergency response plan to coordinate emergency services provided by all governmental agencies. The plan is administered by the California Governor's Office of Emergency Services. The California Governor's Office of Emergency Services coordinates the responses of other agencies, including the U.S. Environmental Protection Agency, the Federal Emergency Management Agency, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices. Local emergency response teams, including fire, police, and sheriff's departments, provide most of the services to protect public health. The California Governor's Office of Emergency Services prepares the State of California Multi-Hazard Mitigation Plan. The State of California Multi-Hazard Mitigation Plan identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The State of California Multi-Hazard Mitigation Plan is federally required under the Disaster Mitigation Act of 2000 for the State of California to receive federal funding. The Disaster Mitigation Act of 2000 requires a State Mitigation Plan as a condition of disaster assistance.

### California Department of Forestry and Fire Protection

The California Public Resources Code (PRC) requires the designation of state responsibility areas (SRAs), which are identified based on cover, beneficial water uses, probable erosion damage, and fire risks and hazards. The financial responsibility of preventing and suppressing fires in an SRA is primarily the responsibility of the state. Fire protection in areas outside SRAs is the responsibility of local or federal jurisdictions and is referred to as local responsibility areas (LRAs) and federal responsibility areas (FRAs), respectively.

The California Department of Forestry and Fire Protection's (CAL FIRE's) Fire and Resource Assessment Program (FRAP) assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Through the FRAP, CAL FIRE provides high-quality special data, maps, and online data viewers to provide critical information related to forest and wildfire management. CAL FIRE maps fire responsibility areas and Fire Hazard Severity Zones (FHSZs), among other things.

SRAs are lands where the state (primarily CAL FIRE) is financially and operationally responsible for wildfire prevention and suppression. These lands are typically unincorporated, rural lands with significant wildland vegetation. SRAs generally exclude incorporated cities and federally owned lands. All SRA lands are subject to state construction codes and standards and defensible space laws.

LRAs are lands where local government agencies, such as city or county fire departments, are primarily responsible for wildfire protection. These typically include incorporated city boundaries, suburban neighborhoods, and developed urban areas. Local jurisdictions typically adopt and enforce their own hazard maps and building codes, although state laws (e.g., defensible space requirements) often still apply.

All SRA and LRA lands are assigned a tier of fire hazard severity. FHSZs are designated by CAL FIRE's Office of the State Fire Marshal. These mapped areas are categorized as Moderate, High, or Very High based on a science-based model that calculates fuel density (i.e., vegetation), terrain (e.g., slope), climate (e.g., wind patterns), and historical fire behavior. The Very High FHSZ is the highest fire hazard designation determined by the state fire marshal. These zones can exist in either an SRA or an LRA. Properties in a Very High FHSZ trigger strict wildfire-resistant construction standards (including Chapter 7A of the California Building Code (CBC), as described further below), the requirement for 100 feet of defensible space, and mandatory real estate disclosures when selling a home.

In addition to mapping hazards, CAL FIRE serves and safeguards the people and protects the property and resources of over 31 million acres of California's privately owned wildlands in the SRA. CAL FIRE's mission emphasizes the management and protection of California's natural resources; a goal that is accomplished through ongoing assessment and study of the state's natural resources and FRAP. CAL FIRE foresters and fire personnel work closely with other agencies to encourage and implement fuel management projects to reduce the threat of uncontrolled wildfires. CAL FIRE provides varied emergency services to 36 counties via contracts with local governments. CAL FIRE's Fire Prevention Program consists of multiple activities, including wildland pre-fire engineering, vegetation management, fire planning, education, and law enforcement. Typical CAL FIRE prevention projects include brush clearance, prescribed fires, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities.

## California Fire Plan

The California Strategic Fire Plan for California (2018) is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE. The plan serves as the state's road map for reducing the risk of wildfire by emphasizing preventive action before a fire starts. The California Fire Plan reduces firefighting costs and property losses, increases firefighter safety, and contributes to ecosystem health. Eight goals outlined by the California Fire Plan include:

1. Identify and evaluate wildland fire hazards and facilitate the collaborative development and sharing of such analyses and data collection.
2. Promote and support local land use planning processes as they relate to protection from wildfire and landowner responsibility.
3. Support and participate in the collaborative development and implementation of local, county, and regional plans that address fire protection and landowner objectives.
4. Increase fire prevention awareness, knowledge, and actions implemented by individuals and communities to reduce human loss, property damage, and impacts on natural resources from wildland fires.
5. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
6. Determine the level of resources necessary to effectively identify, plan, and implement fire prevention using adaptive management strategies.
7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
8. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

## California Fire Code

The California Fire Code (CFC) is Part 9 of 13 parts of the official building regulations to the California Code of Regulations (CCR). This code is also referred to as CCR Title 24, or the California Building Standards Code. The CFC establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from fire and other hazards in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The CFC applies to the construction—including the presence of fire service features and fire apparatus access roads—alteration, movement, enlargement, replacement, repair, equipment, use, occupancy, means of egress, evacuation plans, location, maintenance, and demolition and removal of every building or structure or any appurtenances connected or attached to such building structures throughout the state. In UMC, the CFC is administered by the Chief Building Official of Monterey County.

In addition, CCR Title 14 establishes the State Minimum Fire Safe Regulations, which constitute the minimum wildfire protection standards of the California Board of Forestry and Fire Protection.

### California Building Code

Building standards for high fire hazard areas are identified in the CBC, which is administered by the Monterey County Housing & Community Development, Building Services, in addition to the CFC. Chapters 6–9 of the CBC establish standard building fire prevention systems, fire and smoke protection features, interior finishes, and fire protection and life safety systems. Chapter 7A outlines mandatory, state-enforced materials and construction methods for exterior wildfire exposure to harden buildings against ember intrusion and radiant heat in any FHSZ within SRAs, Very High FHSZs within LRAs, or any wildland-urban interface (WUI) area. Chapter 49 of the CFC establishes minimum standards for the protection of life and property by increasing the ability of a building in any FHSZ within SRAs, Very High FHSZs within LRAs, or any WUI area to resist the intrusion of flames or burning embers projected by a vegetation fire, and contributes to a systematic reduction in conflagration losses. The current 2025 CBC became effective ON January 1, 2026.

### California Health and Safety Code, Section 13000 et seq.

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

### California Residential Code, Chapter 3, Building Planning, Section R337, Material and Construction Methods for Exterior Wildfire Exposure

This section establishes minimum standards for the protection of life and property by increasing the ability of a building in any FHSZ or WUI area within SRAs or in Very High FHSZs within LRAs to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

### California State Multi-Hazard Mitigation Plan

The purpose of the California State Hazard Mitigation Plan is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. The California State Hazard Mitigation Plan guides hazard mitigation activities, emphasizing partnerships among local, state, and federal agencies, as well as the private sector (Cal OES 2023).

### Governor's Office of Land Use and Climate Innovation Fire Hazard Planning Technical Advisory

The Governor's Office of Land Use and Climate Innovation's (formerly the Governor's Office of Planning and Research, or OPR) technical advisory provides context relating to wildfire risk and environmental and regulatory settings, as well as general planning guidance. Guidance topics include outreach and engagement, fire hazard and risk assessment, policy development, and example policies (OPR 2022). The goal of the technical advisory is to provide a robust planning framework for addressing fire hazards, reducing risk, and increasing resilience across California's diverse communities and landscapes. To accomplish this goal, local agencies (i.e., cities and counties) must develop and incorporate effective policies and implementation programs in their general plans and integrate their general plans with other relevant hazard and risk reduction policies, plans, and programs. This technical advisory guides those policies and programs and is also intended to assist city and county planners in discussions with professionals from fire hazard prevention and mitigation, disaster preparedness, and emergency response and recovery agencies.

### California Government Code, Sections 51175–51189 and 66474.02

California Government Code, Sections 51175–51189, designates responsibility to local agencies to identify areas in the state as Very High FHSZ falling under local protection with the LRA. Classification of Very High FHSZ must be consistent with statewide criteria. Designation of Very High FHSZ is based on fuel loading, slope, weather, and other relevant factors, including winds identified as causing wildfire spread. Once identified, information on Very High FHSZ is mapped and made available to the public. The CAL FIRE director periodically reviews the LRA and, as necessary, makes recommendations relative to the designated Very High FHSZ. This section also outlines brush clearance and defensible space maintenance for buildings in the FHSZ, as well as the necessary permit process for building construction and reconstruction. CAL FIRE guides fuel management and defensible space requirements.

CAL FIRE published updated LRA FHSZ maps for UMC in March 2025. To comply with California Government Code, Section 51179, the County adopted these maps by ordinance in August 2025.

In 2012, Senate Bill (SB) 1241 added Section 66474.02 to Title 7 Division 2 of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated in Very High FHSZ in an LRA, or that lie in the SRA, unless certain findings are made before approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief:

- The design and location of the subdivision and its lots are consistent with defensible space regulations found in the PRC Sections 4290 and 4291;
- Structural fire protection services will be available for the subdivision through a publicly funded entity; and
- Ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

## California Public Resource Code

**PRC Section 30253(a)** is a section of the Coastal Act that requires new development to minimize risks to life and property in areas of high geologic, flood, and fire hazard.

**PRC Section 4119** authorizes the U.S. Forest Service, the U.S. Department of the Interior, Bureau of Land Management, and CAL FIRE to inspect properties to determine if they comply with state forest and fire laws, regulations, or use permits.

**PRC Sections 4201–4204** direct CAL FIRE to map areas of significant fire hazards in SRAs. Classification is based on fuels, terrain, weather, and other relevant factors, and falls under either Moderate, High, or Very High. The director of CAL FIRE is required to designate, review, and revise, as necessary, FHSZs and assign to each zone a rating reflecting the degree of fire hazard severity expected to prevail in the zone.

**PRC Section 4290** requires the adoption of minimum fire safety standards related to defensible space that apply to SRA lands under the authority of CAL FIRE and to lands classified and designated as Very High FHSZ in an LRA. These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction in SRAs approved after January 1, 1991, and within lands classified and designated as Very High FHSZ in an LRA after July 1, 2021. The regulations shall include all of the following:

1. Road standards for fire equipment access.
2. Standards for signs identifying streets, roads, and buildings.
3. Minimum private water supply reserves for emergency fire use.
4. Fuel breaks and greenbelts.

**PRC Section 4290.5** requires the California Board of Forestry and Fire Protection, in consultation with the state fire marshal, to identify existing subdivisions with more than 30 dwelling units in the SRA or a Very High FHSZ in an LRA, identified pursuant to Section 51178 of the California Government Code, without a secondary means of egress route that are at significant fire risk. Additionally, the Board, in consultation with the state fire marshal and the local government that identified the subdivisions, shall develop recommendations to improve the subdivisions' fire safety.

**PRC Section 4291** requires a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material to maintain defensible space of 100 feet (or up to the property line, whichever is less) from each side and the front and rear of the structure. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. Here, "fuel" means any combustible material, including petroleum-based products and wildland fuels. The intensity of fuel management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. A greater distance may be required by state law or local ordinances, program standards, rules, or regulations. Clearance beyond the property line may only be required if the state law or local ordinances, program standards, rules, or regulations include findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on the adjacent property shall only be conducted following written consent by the adjacent landowner. This section does not apply to single specimens of trees or other vegetation that are well-pruned and maintained to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. In addition, Section 4291(a) of the PRC requires a minimum of 100 feet of defensible space around all residential, commercial, and industrial buildings in SRAs approved after January 1, 1991. Additionally, Section 4291(a) requires removal of trees that extend within 10 feet of chimneys or stovepipes, removal of dead or dying wood adjacent to or overhanding a building, maintaining clean roofing (i.e., removing leaves, needles or other vegetative materials from roofs), and that prior to construction of a new building or structure, or rebuilding a building or structure damaged by fire a certificate is obtained by a local building official that the dwelling structures comply with building standards including those described in Section 51189 of the California Government Code.

**PRC Section 4427** limits the use of any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tar pots, or grinding devices from which a spark, fire, or flame may originate when the equipment is on or near land covered by forest, brush, or grass. Before such equipment may be used, all flammable material, including snags, must be cleared away from the area around such operation for a distance of 10 feet. A serviceable round-point shovel with an overall length of not less than 46 inches and a backpack pump water-type fire extinguisher, fully equipped and ready for use, must be maintained in the immediate area during the operation.

**Under PRC Section 4741**, per policies established by the State Board of Forestry and Fire Protection, CAL FIRE shall assist local governments in preventing future wildland fire and vegetation management problems by making its wildland fire prevention and vegetation management expertise available to local governments to the extent possible within the

department's budgetary limitations. CAL FIRE recommendations shall be advisory in nature, and local governments shall not be required to follow such recommendations.

#### 4.19.1.3 Local

### 2010 General Plan (Inland)

#### *Safety Element*

The Monterey County General Plan (2010 General Plan) Safety Element presents policies that address wildfire risk and post-wildfire risk (e.g., flooding) in the inland areas of Monterey County (County of Monterey 2010). The County is currently updating the Safety Element to comply with current state law as a separate project. There are numerous policies from the 2010 General Plan Safety Element that are applicable to the project. For instance, Goal S-4 and Policies S-4.1 through S-4.33 are intended to minimize risks from fire. In particular, Policies S-4.1 and S-4.2 encourage and support public education programs and materials on fire hazards and citizen awareness and responsibility in preventing fires. Policies S-4.4 through S-4.6 recommend periodically updating fire hazard and fire risk data and mapping. Several policies include development requirements to reduce fire risk (Policies S-4.7, S-4.11, S-4.12, S-4.15, S-4.20 through S-4.22, S-4.26, S-4.28, and S-4.29). There are also several policies related to ensuring safe and adequate access along roadways and bridges (Policies S-4.8 through S-4.10 and S-4.16 through S-4.19). Policies S-4.13, S-4.14, and S-4.30 support adequate water supply availability for fire suppression. Policies S-4.24, S-4.25, and S-6.7 require intuitive addresses (i.e., sequential house numbering, non-repetitive street naming, standardized lettering of house numbers in subdivision design) and adequate views of posted property addresses. Additionally, Policies S-4.31 through S-4.33 include requirements for fuel modification zones to protect development.

Goals S-2 and S-3 and related policies are intended to reduce risk to life, property, and the environment from storm drainage and flooding, which can be exacerbated in areas that have recently burned. Goal S-5 and applicable policies are intended to help the County anticipate, respond, and recover from emergencies, such as fires and post-fire flooding or slope instability. Specifically, Policies S-5.9, 5.14, and 5.17 support adequate access for emergency response and evacuations. Policy S-5.17 requires Emergency Response Routes and Street Connectivity Plans for Community Areas and Rural Centers and for any development producing traffic at an equivalent or greater level to five or more lots/units.

#### *Open Space Element*

Policies OS-3.3 and OS-3.5(b) encourage best management practices and design considerations for new development to avoid impacts related to steep slopes, erosion, drainage, and other geologic hazards.

#### *Public Services Element*

The Public Services Element provides policies to address critical infrastructure and service issues. The Element includes requirements for Adequate Public Facilities and Services (Policies PS-1.1, PS-1.3, and PS-1.4). Policies PS-1.5 and PS-1.6 ensure adequate public services for new development by calling for an infrastructure phasing plan requiring the installation of infrastructure improvements with each phase of new development and allowing only developments that have or can provide adequate public services and facilities. Additionally, Table PS-1 provides maximum emergency response times for the creation of new residential lots based on land type.

### Area and Master Plans

#### *Toro Area Plan*

Policy T-4.1 prohibits land uses and practices that may contribute to significant increases of siltation, erosion, and flooding in the Toro area.

#### *Fort Ord Master Plan*

Fire, Flood, and Emergency Management Policies A-1, A-2, A-3, and A-4 are intended to support public safety by minimizing the risk from fire hazards. In particular, Policies A-3 and A-4 encourage the evaluation of fire stations, fire suppression staff, and facilities to provide acceptable emergency response time and operations. Fire, Flood, and Emergency Management Policy C-1 requires the County to develop an emergency preparedness and management plan, in conjunction with the City of Marina, City of Seaside, and appropriate fire, medical, and law enforcement agencies.

### Community Plans

#### *Castroville Community Plan*

Goal 10 and Policies 10.1 and 10.2 support the provision of adequate levels of public services and infrastructure to meet the needs of new and existing development.

### 1982 General Plan (Coastal)

The 1982 General Plan presents policies that address wildfire risk in the coastal areas of Monterey County (County of Monterey 1982). Policies 17.1.1 and 17.1.3 encourage community outreach materials at convenient locations from the fire protection agencies and the inclusion of fire protection agencies in the 911 Monterey Countywide telephone emergency system. Policies 17.2.1 and 17.2.2 require continuous updating of fire hazard and fire risk mapping. Policies 17.3.10, 17.3.11, and 17.3.14 provide development standards for access roads and driveways to ensure adequate emergency access. Policy 17.4.4 requires visible house numbers that must be posted when construction begins. Policies 17.6.1 and 17.6.4 encourage coordination with fire protection agencies and CAL FIRE to assure efficient response and to meet peak fire demands.

## Monterey County Local Coastal Program – Land Use Plans

### *North County Land Use Plan (Coastal)*

Specific Policy 2.5.5.A.5 recommends the development of a fuel reduction program for North County's oak woodland and chaparral. Key Policy 2.8.1, General Policies 2.8.2, and Specific Policies 2.8.3 regulate land uses and development in areas of high geologic, flood, tsunami, and fire hazard through best available planning practices. In particular, General Policies 2.8.2 require development siting and design as well as preparation of an environmental report for development in high hazard areas to minimize risk from geologic, flood, tsunami, or fire hazards to a level generally acceptable to the community. Specific Policies 2.8.3.C.3 allows development in portions of a parcel characterized by high to very high fire hazard only if no less hazardous portion of the site is suitable for development and the development will not increase the threat of fire to the public. Specific Policies 2.8.3.C.4 and 5 require development standards in high and very high fire hazard areas, such as adequate access roads for residential development, as well as the use of fire-resistant materials for exterior wall construction and fire-retardant materials for roof construction.

In addition, Specific Policies 4.3.6.D.1 and 2 allow medium and high density residential only where urban services (e.g., water, sewer, roads, transit, fire protection) are available and require residential land divisions to be approved at a density determined by site evaluation and cumulative impact criteria established in the North County Land Use Plan.

### *Carmel Area Land Use Plan*

Key Policy 2.7.2, General Policies 2.7.3, and Specific Policies 2.7.4 regulate land uses and development in areas of high geologic, flood, and fire hazard through best available planning practices. In particular, General Policies 2.7.3 require development siting and design as well as preparation of an environmental report for development in high hazard areas to minimize risk from geologic, flood, tsunami, or fire hazards to a level generally acceptable to the community. All recommended mitigation measures and criteria in the Carmel Area Land Use Plan policies must be required as conditions of coastal permits for County approval. Specific Policies 2.7.4 (Fire Hazards) require all new development to have an adequate water supply for fire suppression and additional development standards in high and very high fire hazard areas, such as adequate access roads for residential development, as well as the use of fire-resistant materials for exterior wall construction and fire-retardant materials for roof construction. In addition, Specific Policies 4.4.3.E.2 allow medium density residential only where urban services (e.g., water, sewer, roads, transit, fire protection) are available and only two units per acre for new subdivisions. As a condition of development, covenants must acknowledge agricultural use on the adjacent parcel and holding the owner harmless for any nuisance due to the agricultural use.

### Monterey County Code – Inland and Coastal

Title 18 of the Monterey County Code (County Code) establishes the County's building and construction regulations, including regulations related to fire. Relevant chapters of Title 18 include County Code Chapter 18.09, which adopts the 2025 CFC, CCR Title 24, Part 9, and the 2018 IFC with applicable amendments from the State of California, and the local amendments of this chapter, as the County's Fire Code. County Code Chapter 18.09.030 establishes local amendments to the 2025 CFC, which include design standards, requirements, and standard fire conditions for development. For example, Appendix R, Roofs, Section R101, General, includes a requirement that all roofs for new buildings in Very High FHSZs shall be a minimum of Class "A" roof assembly as defined by the IBC.

Chapter 18.56 of the County Code adopts Section 4290 et seq. of the PRC, which requires incorporating wildfire protection standards in conjunction with building, construction, and development in designated SRAs and establishes additional fire prevention regulations necessary to meet local conditions of weather, vegetation, or other fire hazards in accordance with Section 4117 of the PRC. Chapter 18.56 of the County Code provides design standards and regulations for emergency access, adequate signing and building numbering, emergency water supply, and fuel modifications as wildfire protection measures. County Code Section 18.56.040 outlines requirements for review of development permit applications for compliance with any recommendations of the Reviewing Authority (Director of the Board of Forestry and Fire Protection, or their designee, including local fire districts, sharing jurisdiction in SRAs) and all applicable regulations of Chapter 18.56 of the County Code prior to development, as well as inspection of the development for compliance with all applicable regulations and fire conditions.

Sections 21.64.230 and 20.64.230 of the County Code establish regulations for all proposed development on slopes in excess of 30 percent (or excess of 25 percent for properties in the North County Land Use Plan [LUP] area). The section requires a use permit or a coastal development permit for all development on these slopes and identifies allowable development and conditions for development.

Sections 16.63.050 and 16.63.060 of the County Code include requirements for submittals for minor and major landscape packages to the County Chief of Planning for review and approval. Section 16.63.070 of the County Code requires water-efficient and fire-resistant landscaping. In particular, Section 16.63.070(B)(8) requires landscape planting to include the use of fire-resistant plant species and be consistent with fire-safe landscaping required by the designated fire district and, as applicable, Chapter 18.56 (Wildfire Protection Standards in State Responsibility Areas) of the County Code.

Section 19.10.090 and 19.10.095 of the County Code require that adequate fire access be provided and that undergrounding of utilities in certain circumstances be provided in new subdivisions.

Ordinance No. 5437, adopted by the County Board of Supervisors on August 19, 2025, updated Fire Hazard Severity Zone maps for inland and coastal areas in the UMC to comply with the requirements of California Government Code, Section 51178.

#### *Title 20 – Coastal Zoning (Coastal)*

Section 20.66.020 refers to Part 2 (North County), Part 3 (Big Sur), Part 4 (Carmel), or Part 5 (Del Monte Forest) of the Monterey County Coastal Implementation Plan for standards related to hazardous areas.

#### *Coastal Implementation Plan*

North County (Part 2) Section 20.144.100 (Hazardous Area Development Standards – Fire Hazards) provides development standards that regulate land use and development, using the best available planning practices to minimize risk to life and property and damage to the natural environment. In particular, Section 20.144.100(C) requires that all development projects in areas of high or very high fire hazard undergo review and incorporate recommendations by the County Fire Warden and/or local fire district into project design. This section also requires that development conform to fire-related policies in the 1982 General Plan.

Carmel Area (Part 4) Section 20.146.080 (Hazardous Area Development Standards – Fire Hazards) provides development standards that regulate land uses and development in areas of high geologic, flood, and fire hazards to minimize risks to life and property and damage to the natural environment. In particular, Section 20.146.080(C)(3) states that new land divisions which create commitment to new or intensified development of each proposed parcel and construction of the proposed access roads shall not create nor significantly contribute to geologic, flood, or fire hazards, nor require construction of new protective devices which would substantially alter natural landforms.

### Monterey County Department of Emergency Management

The County Department of Emergency Management (DEM) coordinates all emergency preparedness, response, and recovery functions and responsibilities as necessary to carry out the direction of the County Board of Supervisors and the provisions of Chapter 2.68 of the County Code. The County DEM has established an Emergency Operations Center that serves as a physical or virtual location designed to support emergency response, business continuity, and crisis communications activities. Staff meet at the Emergency Operations Center to manage preparations for an impending event or manage the response to an ongoing incident. To respond effectively to all types of emergencies, County DEM maintains the County Emergency Operations Plan (EOP) (discussed further below) on behalf of the Operational Area. The Monterey County Operational Area encompasses the County's boundaries and all its political subdivisions, including special districts. The lead agency of the Operational Area facilitates and coordinates information, resources, and decisions regarding priorities among local governments in the Operational Area.

## Monterey County Emergency Operations Plan

The County EOP describes the Operational Area's emergency organization; the roles, responsibilities, and authorities within its boundaries; and the actions that should be taken during an emergency. The County EOP is the overarching emergency planning document, with additional specific annexes that describe response activities and coordination during a particular hazard, threat, or incident-specific emergency. Although the annexes are considered part of the County EOP, they represent stand-alone plans and are not included in the County EOP itself (County of Monterey 2020). The County EOP addresses the entire spectrum of contingencies, ranging from relatively minor incidents to large-scale disasters.

### *Evacuation and Transportation Plan Annex*

The County EOP Evacuation and Transportation Plan Annex provides strategies for managing evacuations that exceed the day-to-day capabilities of the various public safety agencies in Monterey County. As dictated by the County EOP, the local law enforcement agency is charged with the responsibility of evacuation in response to a major event threatening the life safety of residents of and visitors to the Monterey County Operational Area. With a special emphasis placed on wildfire threat, the strategies outlined in the plan are designed using an all-hazards approach to preparing for and managing evacuations. "Life safety" is the highest priority in incident management. The County EOP is designed to be applied during any emergency event that precipitates the need to evacuate an area, regardless of the threat or hazard. The purpose of the annex is to provide a guide for using mass transportation resources in the Operational Area to (1) support the evacuation of populations affected by an incident; and (2) support the inbound movement of emergency service workers.

The annex divides evacuation routes in each evacuation zone into primary and secondary routes. Maps of primary and secondary routes, including specific roadways, are found in each individual zone section. Zone-specific evacuation routes included in the County EOP provide a more specific and detailed description of evacuation routes than the 2010 General Plan. The individual plans do not contradict the 2010 General Plan guidelines or policies for emergency evacuation routes.

## Monterey County Community Wildfire Protection Plan

On December 13, 2010, the County Board of Supervisors adopted the Monterey County Community Wildfire Protection Plan, which was last updated on March 1, 2016. The Community Wildfire Protection Plan was prepared by the Monterey Fire Safe Council in collaboration with various public agencies, including CAL FIRE, the U.S. Forest Service, and the Bureau of Land Management, along with other stakeholders, in accordance with the Healthy Forests Restoration Act. The Community Wildfire Protection Plan is an advisory document that guides wildfire prevention and preparation activities throughout Monterey County. The purposes of the plan include providing wildfire planning recommendations; providing recommendations for hazardous

fuel assessment and reduction, particularly in the WUI zones; reducing the potential for ignitability of structures and addressing human activities that may cause wildfires; and reducing the spread of wildfires in WUI zones (Monterey Fire Safe Council 2016).

### Monterey County Multi-Jurisdictional Hazard Mitigation Plan

The Monterey County Multi-Jurisdictional Hazard Mitigation Plan presents environmental hazard analysis, describes important transportation and utility infrastructure, as well as populations at risk from environmental hazards, describes emergency evacuation systems, and provides mitigation actions to protect Monterey County populations and infrastructure from environmental hazards. One of the primary environmental hazards discussed in the Monterey County Multi-Jurisdictional Hazard Mitigation Plan is wildfire. The Monterey County Multi-Jurisdictional Hazard Mitigation Plan complies with all requirements set forth under the Disaster Mitigation Act of 2000 and includes information also relevant to the Safety Element.

## 4.19.2 Environmental Setting

The following sections describe the environmental setting for the project as it relates to wildfire.

### 4.19.2.1 Wildfire Behavior and Contributing Factors

Wildfire behavior is a product of several variables—primarily climate, vegetation, topography, and human influences—that intermix to produce local and regional fire regimes that affect how, when, and where fires burn. The fire regime in any area is defined by several factors, including fire frequency, intensity, and severity and area burned. An understanding of each of these factors is important for determining how the variables that affect fire behavior produce fire risk. "Fire frequency" refers to the number of fires that occur in a given area over a given period, "fire intensity" refers to the speed at which fire travels and the heat that it produces, "fire severity" refers to the extent to which ecosystems and existing conditions are affected or changed by a fire, and "area burned" refers to the size of the area burned by wildfire (California Board of Forestry and Fire Protection 2019). Human influence on wildfire is broad and can be substantial. It includes direct influences, such as the ignition and suppression of fires, and indirect influences, such as alterations in land use patterns that support modified vegetative regimes and increased development in the WUI.

Wildfires are a significant threat in California, particularly in recent years as the landscape responds to climate change and decades of fire suppression. As climate change persists, it is anticipated to produce increasing temperatures and drier conditions that would generate abundant dry fuels. All wildfires (those initiated by both natural and human-made sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017). In addition, climate change has led to the exacerbation of wildfire conditions during a longer period of the year as the spring season warms, driving earlier spring snowmelt and as winter precipitation

decreases overall (Westerling et al. 2006). Further, wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have led to an increase in wildfire activity (Westerling et al. 2006; Schoennagel et al. 2017). In particular, the western United States, including California, has seen increases in wildfire activity in terms of area burned, the number of large fires, and fire season length (Westerling et al. 2006; Abatzoglou and Williams 2016). The topography, vegetation, and climatic conditions associated with Monterey County combine to create a unique situation capable of supporting large-scale, often damaging wildfires.

### 4.19.2.2 Wildfire Protection Responsibility Areas

Local, state, Tribal, and federal organizations all have legal and financial responsibility for wildfire protection. Monterey County contains federal, state, and local wildfire protection responsibility areas, which are classified as FRA, SRA, and LRA, respectively.

FRAs are wildfire-prone areas owned or managed by a federal agency. Primary financial and rule-making jurisdictional authority rests with the relevant federal land agency. The following agencies control federal lands in Monterey County:

- **U.S. Forest Service:** Los Padres National Forest
- **National Park Service:** Pinnacles National Park
- **U.S. Department of Defense:** Fort Hunter Liggett, Defense Language Institute, and Presidio of Monterey
- **Bureau of Land Management:** Fort Ord National Monument, California Coastal National Monument, Williams Hill
- **California National Guard:** Camp Roberts

SRAs are lands where the CAL FIRE has legal and financial responsibility for wildfire protection and administers fire hazard classifications and building standard regulations. They include forested land and land that is generally considered wildland. SRAs do not include incorporated cities or federal lands (i.e., FRAs). The CAL FIRE San Benito-Monterey Unit (BEU) provides wildland fire protection to the 2.1 million acres of SRA land in the UMC, located along the central coast between San Luis Obispo County on the south and Santa Cruz and Santa Clara Counties on the north (County DEM 2023; Figure 4.19-1, Monterey County Fire Hazard Severity Zones, and Figures 4.19-1a through 4.19-1i, Opportunity Sites in Fire Hazard Severity Zones).

LRAs may include flammable vegetation and WUI areas where the financial and jurisdictional responsibility for improvement and wildfire protection is held by a local government agency. LRAs include land in cities, cultivated agriculture lands, non-flammable lands in unincorporated areas, and lands that do not meet the criteria for SRA or FRA. Fire protection services in LRAs in the UMC are provided by the Aromas Tri-County Fire Protection District, Big Sur Volunteer Fire

Brigade, Cachagua Fire Protection District, Carmel Highlands Fire Protection District, Cypress Fire Protection District, Gonzales Rural Fire Protection District, Greenfield Fire Protection District, Mid-Coast Volunteer Fire Brigade, Mission Soledad Rural Fire Protection District, Monterey County Regional Fire Protection District, North County Fire Protection District of Monterey County, Pebble Beach Community Services District, South Monterey County Fire Protection District, CAL FIRE, and other participating fire agencies in the Monterey County Fire Service Mutual Aid system. The Monterey County Fire Service Mutual Aid system is a coordinated framework that allows fire agencies (i.e., regional fire protection districts, local fire departments, Tribal firefighters, and CAL FIRE) to share resources, personnel, and equipment when local capabilities are overwhelmed. City fire departments or fire protection districts are responsible for fire protection in most incorporated cities in the LRA of Monterey County.

The Monterey County Community Wildfire Protection Plan outlines the various aspects that affect fire behavior in the UMC, including topography, vegetation and fuels, and climate and weather conditions (refer to Section 4.19.1.3). The plan also incorporates the various factors in wildland fire severity factors, in addition to homes and property in the WUI. Both wildland and WUI areas account for a substantial amount of land in UMC, as described further in Section 4.19.2.3.

### 4.19.2.3 Fire Hazard Severity Zones, Wildland-Urban Interface, and Steep Slopes

#### Fire Hazard Severity Zones

CAL FIRE has identified FHSZs that designate areas (based on factors such as fuel/vegetation, slope/terrain, and fire weather) with varying degrees of fire hazard (i.e., Moderate, High, and Very High), which are mapped as part of its FRAP. FHSZs identify areas where wildfire hazards could be more severe and, therefore, are of greater concern. The FHSZ model inputs frequency of fire weather, ignition patterns, expected rate of spread, and past fire history. It also accounts for flying ember production based on the area of influence where embers are likely to land and cause ignitions. Although FHSZ classifications do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and therefore are of greater concern.

CAL FIRE also maps fire threat, which combines expected fire frequency with potential fire behavior. About 80 percent of land in UMC is categorized as having a high, very high, or extreme fire threat (County DEM 2022). Moderate, High, and Very High FHSZs in the UMC are primarily in rural areas, such as Carmel Valley, Big Sur and coastal mountains, and the mountains and hills on the eastern border of the Salinas River. Although sharing a border and similar characteristics with the FRAs of Big Sur and the LRAs, the FRAs are not included in the CAL FIRE FHSZ mapping, and there are no other publicly available fire hazard designations for FRAs.

Several opportunity sites are in High and Very High FHSZs, as shown in Table 4.19-1, Opportunity Sites Moderate, High, and Very High FHSZs, and on Figures 4.19-1a through 4.19-1i. The remainder of the opportunity sites not shown in Table 4.19-1, Opportunity Sites Moderate, High, and

Very High Fire Hazard Severity Zones, (Opportunity Sites 1 through 6, 11 through 15, 20, 25 through 30, 32, 41, 42, 49 through 51, and 64) are not designated as Moderate, High, or Very High FHSZs.

**Table 4.19-1. Opportunity Sites Moderate, High, and Very High Fire Hazard Severity Zones**

| Opportunity Site No. | SRA FHSZ | LRA FHSZ |
|---|---|---|
| 8 | Moderate | — |
| 9 | High and Moderate | — |
| 10 | Moderate | — |
| 16 | Very High | Very High |
| 17 | — | Moderate |
| 18 | — | Moderate |
| 19 | — | Moderate |
| 21 | — | Moderate, High |
| 22 | — | Moderate, High |
| 23 | Very High | Very High |
| 24 | — | Moderate, High, Very High |
| 31 | — | Moderate, High |
| 33 | — | Moderate |
| 34 | — | Moderate |
| 35 | — | Moderate |
| 36 | Very High | High, Very High |
| 37 | Very High | Moderate, High |
| 38 | Very High | — |
| 39 | Moderate | — |
| 40 | Very High | — |
| 43 | Very High | Very High |
| 44 | High and Moderate | — |
| 45 | Very High | — |
| 46 | Very High | Moderate, High |
| 47 | — | High |
| 48 | — | Moderate, High, Very High |
| 52 | — | High |
| 53 | — | High |
| 55 | Very High | Moderate |
| 56 | Very High | Moderate, High |

**Source:** CAL FIRE 2025a.

**Notes:** FHSZ = Fire Hazard Severity Zone; LRA = local responsibility area; SRA = state responsibility area

### Wildland-Urban Interface

The WUI is the zone of transition between unoccupied land and human development. It is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (U.S. Fire Administration 2025). CAL FIRE's WUI designation dataset is derived from the 2015 Assessment of Forest and Rangelands, produced by the FRAP. CAL FIRE advises that this layer is not suited for WUI designations for individual houses or neighborhoods, and a field review process is still required. WUI designations include Interface, Intermix, and Influence Zone, which are defined based on housing density classes, as described further below.

Following are the housing density classes (DEN4) used in the WUI definitions:

- **Class 1:** Less than one house per 20 acres
- **Class 2:** One house per 20 acres to one house per 5 acres
- **Class 3:** More than one house per 5 acres to 1 house per acre
- **Class 4:** More than 1 house per acre

The **Interface** consists of dense housing adjacent to vegetation that can burn in a wildfire. Interface areas meet the following criteria:

- DEN4 Class 2, 3, or 4
- In Moderate, High, or Very High Fire Hazard Severity Zone
- Not dominated by wildland vegetation
- Spatially contiguous groups of 30-meter cells that are 10 acres and larger

The **Intermix** consists of housing development interspersed in an area dominated by wildland vegetation subject to wildfire. Intermix areas meet the following criteria:

- Not Interface
- DEN4 Class 2
- DEN4 Class 3, 4 dominated by wildland vegetation
- In Moderate, High, or Very High Fire Hazard Severity Zone
- Improved Parcels only
- Spatially contiguous groups of 30-meter cells that are 10 acres and larger

The **Influence Zone** consists of wildfire susceptible (i.e., wildland) vegetation up to 1.5 miles from Interface or Intermix.

Figure 4.19-2, Monterey County Wildland-Urban Interface, depicts the WUI areas in Monterey County. Only Opportunity Sites 2, 3, 13, 25, 26, 27, 28, 29, 49, 50, and 51 are completely outside the WUI as shown on Figures 4.19-2a through 4.19-2i, Wildland-Urban Interface. Opportunity sites that are within or even partially within one of the WUI zones are listed in Table 4.19-2, Opportunity

Sites in WUI Designations, ordering the WUI zone from the one that encompasses the most to the least land within the site. If an opportunity site was found to be even slightly within a WUI zone, it is listed in Table 4.19-2, Opportunity Sites in Wildland-Urban Interface Designations. For context of the fire threat, the FHSZ the site is within is also listed.

**Table 4.19-2. Opportunity Sites in Wildland-Urban Interface Designations**

| Opportunity Site No. | WUI Zone | SRA FHSZ | LRA FHSZ |
|---|---|---|---|
| 1 | Influence Zone | — | — |
| 4 | Interface, Influence Zone | — | — |
| 5 | Influence Zone | — | — |
| 6 | Influence Zone | — | — |
| 8 | Influence Zone, Intermix | Moderate | — |
| 9 | Influence Zone, Intermix | High | — |
| 10 | Interface, Intermix | Moderate | — |
| 11 | Influence Zone | — | — |
| 12 | Influence Zone | — | — |
| 14 | Influence Zone | — | — |
| 15 | Influence Zone | — | — |
| 16 | Influence Zone, Intermix, Interface | Very High | Very High |
| 17 | Influence Zone, Interface | — | Moderate |
| 18 | Influence Zone, Interface | — | Moderate |
| 19 | Interface | — | Moderate |
| 20 | Interface, Influence Zone | — | — |
| 21 | Influence Zone, Interface | — | Moderate, High |
| 22 | Influence Zone, Interface | — | Moderate, High |
| 23 | Interface | Very High | Very High |
| 24 | Influence Zone, Interface | — | Moderate, High, Very High |
| 30 | Influence Zone | — | — |
| 31 | Influence Zone, Interface | — | Moderate, High |
| 32 | Influence Zone, Interface | — | — |
| 33 | Interface | — | Moderate |
| 34 | Interface | — | Moderate |
| 35 | Interface | — | Moderate |
| 36 | Interface | Very High | High, Very High |
| 37 | Influence Zone | Very High | Moderate, High |
| 38 | Intermix, Influence Zone, Interface | Very High | — |
| 39 | Influence Zone, Intermix, Interface | Moderate | — |
| 40 | Influence Zone, Intermix | Very High | — |
| 41 | Influence Zone | — | — |

**Table 4.19-2. Opportunity Sites in Wildland-Urban Interface Designations**

| Opportunity Site No. | WUI Zone | SRA FHSZ | LRA FHSZ |
|---|---|---|---|
| 42 | Influence Zone, Interface | — | — |
| 43 | Intermix | Very High | Very High |
| 44 | Interface, Intermix, Influence Zone | High | — |
| 45 | Influence Zone, Intermix | Very High | |
| 46 | Intermix, Influence Zone | Very High | Moderate, High |
| 47 | Influence Zone | FRA | High |
| 48 | Intermix, Interface | — | Moderate, High, Very High |
| 52 | Influence Zone, Intermix | — | High |
| 53 | Influence Zone | — | High |
| 54 | Interface | — | — |
| 55 | Intermix, Influence Zone, Interface | Very High | Moderate |
| 56 | Intermix, Interface | Very High | Moderate, High |
| 64 | Interface | — | — |

**Source:** CAL FIRE 2025a; CAL FIRE 2025b.

**Notes:** FHSZ = Fire Hazard Severity Zone; FRA = federal responsibility area; LRA = local responsibility area; SRA = state responsibility area; WUI = wildland-urban interface

## Steep Slopes

According to CAL FIRE, fire typically burns more quickly and intensely up steep slopes. CAL FIRE identifies slopes less than 20 percent as flat or mild slopes, 20–40 percent as mild to moderate slopes, and greater than 40 percent as moderate to steep slopes (CAL FIRE 2025c). The County identifies slopes greater than 25 percent as slopes requiring avoidance or restrictions for development regulations (Sections 20.64.230 and 21.64.230 of the County Code and 2010 General Plan Policy OS-3.5). However, opportunity sites within, partially within, or adjacent to slopes 25 percent or greater in UMC are conservatively identified in Table 4.19-3, Opportunity Sites in or Adjacent to Slopes 25 Percent or Greater, along with the FHSZ the site is mapped within for context. There are 31 opportunity sites that are within, partially within, or adjacent to slopes 25 percent or greater. If an opportunity site was found to be even slightly in an area identified with steep slopes, it is listed in Table 4.19-3. The remaining opportunity sites not listed in Table 4.19-3 are not within or immediately adjacent to steep slopes.

**Table 4.19-3. Opportunity Sites in or Adjacent to Slopes 25 Percent or Greater**

| Opportunity Site No. | Proximity to Slopes | SRA FHSZ | LRA FHSZ |
|---|---|---|---|
| 4 | Partially Within | — | — |
| 6 | Adjacent | — | — |
| 8 | Adjacent/Partially Within | Moderate | — |
| 9 | Adjacent/Partially Within | High | — |
| 10 | Adjacent/Partially Within | Moderate | — |
| 13 | Partially Within | — | — |
| 14 | Partially Within | — | — |
| 15 | Partially Within | — | — |
| 16 | Adjacent/Partially Within | Very High | Very High |
| 22 | Partially Within | — | Moderate, High |
| 24 | Adjacent | — | Moderate, High, Very High |
| 25 | Partially Within | — | — |
| 31 | Partially Within | — | Moderate, High |
| 32 | Partially Within | — | — |
| 35 | Partially Within | — | Moderate |
| 38 | Adjacent/Partially Within | Very High | — |
| 39 | Adjacent/Partially Within | Moderate | — |
| 40 | Adjacent/Partially Within | Very High | — |
| 42 | Adjacent/Partially Within | — | — |
| 43 | Adjacent/Partially Within | Very High | Very High |
| 44 | Adjacent/Partially Within | High | — |
| 45 | Adjacent/Partially Within | Very High | — |
| 46 | Adjacent/Partially Within | Very High | Moderate, High |
| 47 | Adjacent/Partially Within | FRA | High |
| 48 | Partially Within | — | Moderate, High, Very High |
| 52 | Adjacent | — | High |
| 53 | Partially Within | — | High |
| 54 | Partially Within | — | — |
| 55 | Partially Within | Very High | Moderate |
| 56 | Adjacent/Partially Within | Very High | Moderate, High |
| 64 | Adjacent | — | — |

**Source:** County of Monterey 2020; CAL FIRE 2024.

**Notes:** FHSZ = Fire Hazard Severity Zone; FRA = Federal Responsibility Area; LRA = Local Responsibility Area; SRA = state responsibility area

### 4.19.2.4 Historic Wildfires in Monterey County

The frequency, intensity, and impact of large wildland fires in Monterey County have increased in recent years, specifically in the Santa Lucia Range. The 1977 Marble Cone Fire, which was started by lightning, burned from Cone Peak to Carmel Valley and consumed most of the vegetation within the entire Big Sur and Little Sur River watersheds. While the fire burned more than 173,000 acres, no lives were lost or structures destroyed. Refer to Table 4.19-4, Large (Over 1,000-Acre) Historic Wildfires in Monterey County (1975–2025).

Several notable fires have occurred in WUI zones in Monterey County, which generate increased risk of fire spreading to residential uses and other populated areas. The Gallery/Basin Complex Fire, a large wildfire near Big Sur in 2008, burned more than 163,000 acres, destroyed 58 structures, and damaged an additional nine structures. The fire burned most of the Ventana Wilderness. The Indians Fire, which occurred during this same period, burned an additional 76,460 acres, leaving 15 structures destroyed and one damaged. These combined events made 2008 the most destructive year in recorded history for fires in Monterey County.

In 2013, the Pfeiffer Fire burned 917 acres near Big Sur and damaged or destroyed 38 structures, including 34 residential structures and four outbuildings. In July 2016, the Soberanes Fire began as an illegal campfire in Garrapata State Park in Monterey County. Fueled by winds and dry, unmanaged vegetation resulting from several years of extreme drought, the fire quickly spread beyond the park and threatened lives, homes, property, and the environment. The Soberanes Fire burned a total of 132,104 acres in the Santa Lucia Range. The year 2020 was another record year for fires in Monterey County, with numerous wildfires burning at the same time. For example, in August 2020, the River, Carmel, and Dolan Fires occurred in different locations across Monterey County at the same time, burning a total of 181,738 acres (County DEM 2023).

**Table 4.19-4. Large (Over 1,000-Acre) Historic Wildfires in Monterey County (1975–2025)**

| Year | Fire Name | Acres Burned |
|---|---|---|
| 2025 | Salt | 25,554 |
| 2024 | Metz | 1,055 |
| 2024 | Boone | 17,615 |
| 2021 | Sargent | 1,118 |
| 2021 | Willow | 2,878 |
| 2020 | Carmel | 6,997 |
| 2020 | Mineral | 29,667 |
| 2020 | River | 50,214 |
| 2020 | Dolan | 124,527 |
| 2019 | Lonoak | 2,521 |
| 2018 | Turkey | 2,223 |
| 2017 | Garza | 48,887 |

**Table 4.19-4. Large (Over 1,000-Acre) Historic Wildfires in Monterey County (1975–2025)**

| Year | Fire Name | Acres Burned |
|---|---|---|
| 2017 | Park | 1,649 |
| 2017 | Parkfield | 1,822 |
| 2016 | Chimney | 46,234 |
| 2016 | Metz | 3,857 |
| 2016 | Soberanes | 132,104 |
| 2016 | Stony | 3,067 |
| 2016 | Coleman | 2,523 |
| 2015 | Tassajara | 1,076 |
| 2012 | Turkey | 2,530 |
| 2009 | Bryson | 2,257 |
| 2009 | Gloria | 6,436 |
| 2008 | Chalk | 16,266 |
| 2008 | Indians | 76,460 |
| 2008 | Gallery/Basin Complex | 163,607 |
| 2007 | Tar | 5,671 |
| 2006 | Rico | 14,509 |
| 2005 | Johnson | 1,383 |
| 2000 | Plaskett 2 | 5,812 |
| 2000 | North Fork | 1,736 |
| 2000 | Unnamed | 1,028 |
| 2000 | Unnamed | 1,045 |
| 1999 | Kirk | 85,835 |
| 1998 | Unnamed | 1,357 |
| 1998 | Unnamed | 7,345 |
| 1996 | Sur | 4,407 |
| 1996 | Wild | 25,512 |
| 1994 | Basham | 1,098 |
| 1993 | Metz | 1,359 |
| 1993 | Rancho | 5,415 |
| 1992 | Unnamed | 1,280 |
| 1992 | Unnamed | 2,458 |
| 1992 | Seco | 2,659 |
| 1992 | Jolon | 1,618 |
| 1989 | Molera #2 | 2,745 |
| 1987 | Unnamed | 1,106 |
| 1986 | Bryant Canyon | 2,428 |
| 1986 | Deer Valley Ranch | 1,073 |
| 1986 | Lowes | 2,852 |

**Table 4.19-4. Large (Over 1,000-Acre) Historic Wildfires in Monterey County (1975–2025)**

| Year | Fire Name | Acres Burned |
|---|---|---|
| 1986 | River | 5,469 |
| 1986 | Bottcher | 2,557 |
| 1985 | Gorda-Rat | 56,158 |
| 1985 | Wizard | 4,830 |
| 1985 | Unnamed | 14,370 |
| 1985 | Seco | 1,565 |
| 1985 | Cherry | 40,642 |
| 1985 | Garlinger | 1,078 |
| 1985 | Piney Creek | 1,563 |
| 1981 | Gonzales Dump | 1,156 |
| 1981 | Gamboa #1 | 3,694 |
| 1980 | Shirttail | 2,045 |
| 1979 | Nacimiento | 6,070 |
| 1979 | Freeman Flat | 1,346 |
| 1979 | Kaupp | 1,609 |
| 1979 | Tomason #2 | 1,861 |
| 1978 | Turkey Flat | 1,330 |
| 1978 | Yost | 1,619 |
| 1977 | Marble Cone | 173,333 |
| 1976 | Indians | 9,909 |
| 1975 | Miguel | 7,094 |

**Source:** CAL FIRE 2026.

### 4.19.2.5 Wildfire Management

Wildfire protection and response in California are the responsibility of the federal, state, or local government. On federally owned land, or FRAs, fire protection is provided by the federal government, often in partnership with local grants and contracts. In SRAs, CAL FIRE has a legal responsibility to provide fire protection. In LRAs, wildfire protection and response are the responsibility of city fire departments, fire protection districts, counties, or, in some cases, CAL FIRE under contract to local government.

As previously mentioned, the CAL FIRE BEU provides wildland fire protection to the 2.1 million acres of SRA land in UMC and has Cooperative Fire Protection Agreements with several fire protection districts. The special districts providing fire protection services cover approximately 958,080 acres (almost half of the land area) in Monterey County, and include the following (County DEM 2023):

- Aromas Tri-County Fire Protection District (agreement with BEU)
- Big Sur Volunteer Fire Brigade

- Cachagua Fire Protection District
- Carmel Highlands Fire Protection District (agreement with BEU)
- Cypress Fire Protection District (agreement with BEU)
- Gonzales Rural Fire Protection District
- Greenfield Fire Protection District
- Mid-Coast Volunteer Fire Brigade
- Mission Soledad Rural Fire Protection District (agreement with BEU)
- Monterey County Regional Fire Protection District
- North County Fire Protection District
- Pebble Beach Community Services District (agreement with BEU)
- South Monterey County Fire Protection District (agreement with BEU)

#### 4.19.2.6 Emergency Response and Evacuation

### Emergency Operations

The Monterey County Sheriff's Office is the lead agency regarding evacuation events in unincorporated areas in Monterey County. As the lead agency, the Sheriff's Office is responsible for issuing evacuation orders in coordination with the County Executive for Sheriff's jurisdictions; providing situational information from patrol beats, as well as from the public through the emergency dispatch center; providing contractual security to the County Public Works, Facilities, and Parks Department and Monterey-Salinas Transit; and providing security to the populations under its jurisdiction.

Other agencies playing a primary role in emergency operations are the County DEM; County Public Works, Facilities, and Parks Department; Monterey-Salinas Transit; American Medical Response; fire protection districts; and County Housing and Community Development (HCD), Building Services. The County DEM is responsible for coordinating organized planning efforts with County departments, local cities, and special districts before and during disasters, as well as maintaining the Operational Area Emergency Operations Center. Monterey County Public Works, Facilities, and Parks Department is responsible for the operations of the County's non-state roads and bridges and UMC roads and bridges, and provides resources for road maintenance, surveying, and construction operations. During large-scale events, field-level command and control of transportation resources is conducted by Monterey-Salinas Transit. American Medical Response is the largest Advanced Life Support ground transportation provider for Monterey County. When not transporting patients in life-threatening emergencies, its special transportation capabilities are used for paratransit to, from, and between shelters. The fire protection districts provide search, rescue, and recovery operations and emergency medical services during and following emergency events. Additionally, County HCD Building Services provides damage assessment, conducts emergency building inspections, and facilitates the emergency permitting process for repairs after disasters.

State agencies that play a role in emergency response operations include, but are not limited to, the California Highway Patrol, California Governor's Office of Emergency Services, and the California Department of Transportation. Under a state of emergency, these agencies operate under the power of the state governor and are coordinated between state and local operation centers. Other federal and state agencies are also engaged depending on the type of emergency.

## Evacuation Operations

The County DEM (formerly Office of Emergency Services) maintains the EOP for the Operational Area, which encompasses Monterey County and all its political subdivisions, including special districts (refer to Section 4.19.2.5). The EOP contains additional specific annexes that describe response activities and coordination during a particular hazard, threat, or incident-specific emergency. The EOP Transportation and Evacuation Annex is the adopted emergency evacuation plan for Monterey County and outlines the evacuation procedures (County of Monterey 2022a).

The County EOP Evacuation and Transportation Annex contains guidelines for evacuation phases. These phases consist of eight generally accepted evacuation phases:

1. **Initial Incident and On-Scene Response:** Local jurisdiction first responders routinely issue shelter-in-place and small-scale evacuation recommendations.
2. **Situation Analysis and Evaluation:** Efforts focus on developing situational awareness of the impacts of the event, supporting evacuation decision-making by senior leaders, and allowing initial planning for developing evacuation operations.
3. **Decision to Evacuate:** The situational awareness developed previously is used to determine the location of populations who need to be evacuated and the priority for conducting evacuations.
4. **Mobilization:** This is the process of notifying agencies, people, and systems to mobilize resources in order to conduct the evacuations, including incident command and management structures, public works, transportation, care and shelter, etc.
5. **Notification:** After a decision has been made to evacuate populations, notification messages are developed, coordinated, and delivered from initial evacuation operations to return operations.
6. **Evacuation:** Includes the re-establishment of the transportation system to facilitate movement of affected populations out of affected areas and the movement of resources into affected areas. This phase encompasses the movement of evacuees in and outside the affected area. Operations address the provision of transportation services to those requiring mass transit, targeted transportation services for people with access and functional needs, traffic management on priority transportation routes, and the provision of support services (e.g., fuel, food, water) along designated routes.

7. **Care and Shelter:** After initial evacuation, various populations will have follow-on transportation needs, primarily tourists who require transportation outside the area to return home, and individuals with access and functional needs that require transportation to obtain support services. Additionally, because many of the evacuees may not be able to return to their residences, they will need follow-on transportation to interim housing.
8. **Return and Recovery:** Operations support the gradual movement of evacuees back into affected areas once the areas and homes are habitable again.

The decision to evacuate or shelter-in-place is based on an analysis of the situation by public safety and emergency management officials based on the unique conditions of the specific incident. Public safety and emergency management professionals must use the best information available, their training and knowledge, and a sound decision-making process to determine when and for whom an evacuation is necessary.

A complete incident analysis should include consideration of:

- The nature of the hazard (i.e., magnitude, source, and expected duration);
- Weather and environmental conditions;
- At-risk populations (including numbers, demographics, special needs, and transportation requirements); and
- The geography and infrastructure at risk.

In addition, the EOP Transportation and Evacuation Annex identifies the following factors as having direct bearing on emergency evacuations:

- Number of people evacuated
- Population density of area evacuated
- Time available for evacuation
- Distance of travel necessary to reach safety
- Any impediments to evacuation routes
- Weather/temperature
- Time of day/year and day of week
- Availability and capacity of evacuation routes
- Vulnerability of evacuation routes due to the hazard or threat
- Availability of resources to support evacuation
- Risk to evacuation personnel (e.g., law enforcement, fire, transportation personnel)

An imminent threat to life and safety will require an evacuation order or warning when the risk to the population is greater if they remain in place. Ultimately, law enforcement and fire officials at the field level have the authority to determine the extent and implementation of evacuations; they

often work together in a unified command structure. An evacuation warning (sometimes used interchangeably with the term "advisory") means those in a specific area should be prepared to evacuate at any time. People do not need to leave the structure immediately, but should be alert and prepared to leave if an evacuation order is issued. An evacuation order is issued when danger is imminent, and conditions exist that seriously imperil or endanger lives. When an evacuation order is issued, those in identified areas should leave immediately and relocate to a safer location.

The first step in a managed evacuation is to assess the situation and determine the precise area of evacuation, the appropriate ingress and egress routes, and the location of reception center(s). Once a decision to evacuate or shelter-in-place has been determined, extensive efforts will be undertaken to alert the public through all available means. It is expected that most of the affected individuals will evacuate using private cars. Evacuees requiring transportation will be directed to a pick-up point (like a bus stop) to await transportation. Pick-up points are locations where individuals can gather to await mass transit. People who are unable to get to a pick-up point will be given instructions to call 911 or another number to request assistance at their location.

The EOP Transportation and Evacuation Annex divides Monterey County into seven evacuation regions: Big Sur, Carmel Valley, North County, Peninsula, Salinas, Salinas Valley, and South County (refer to Figure 4.19-3, Monterey County Operational Area Evacuation Regions). The annex further subdivides the evacuation regions into evacuation zones to allow jurisdictions to prioritize evacuation orders for the most vulnerable zones first and limit the need to evacuate large areas not under the threat. Evacuation and shelter-in-place zones promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under the threat. Evacuation regions and zones were collaboratively developed by Monterey County DEM, fire protection districts, and law enforcement agencies representing their respective areas of responsibility and spheres of influence. Criteria used in the development of the evacuation zones include:

- Severe hazard threats (e.g., tsunami or wildfire)
- Population density
- Ingress and egress
- Transportation corridors
- Access and Functional Needs (i.e., vulnerable) Populations
- Natural boundaries (e.g., waterways and mountains)
- Community dynamics

For each unique emergency incident, Incident Command/Unified Command will identify which pre-developed evacuation zones in the regions will be under a shelter-in-place, evacuation warning, or evacuation order. Using these zones will allow alert and warning notifications to be

targeted more precisely and reduce evacuation fatigue in the community. If the evacuation zone is not appropriate, Incident Command/Unified Command will modify or establish an outer perimeter that prevents access to the affected area. This perimeter will be established outside the hazard zone and will remain in place until the evacuation order is rescinded.

The 2010 General Plan Safety Element identifies U.S. Route 101, State Routes (SR-) 1, 25, 68, 129, 146, 156, 183, 198, and 218 as evacuation routes as well as numerous County roads (Policy S-5.14). Policy S-5.14 also clarifies that all public thoroughfares, private roads, and deeded emergency accesses shall be considered potential evacuation routes and that these routes may be employed during tactical situations at the discretion of the Monterey County Sheriff and/or the Incident Commander. As described in the EOP Transportation and Evacuation Annex, Incident Command/Unified Command will identify additional priority routes for local transportation based on the following roadway characteristics and factors:

- Location of affected populations;
- Shortest route to the designated destination areas (possible shelter locations);
- Roadways that are not expected to become disabled while the evacuation is in progress;
- Ability to increase capacity and traffic flow using traffic control strategies;
- Maximum number of lanes that provide continuous flow through the evacuation area;
- Availability of infrastructure to disseminate real-time conditions and messages to evacuees en route, such as changeable message signs; and
- Minimal number of potentially hazardous points and bottlenecks, such as bridges, tunnels, and lane reductions.

The EOP Transportation and Evacuation Annex states that managing traffic flow is key to efficient evacuation, allowing a jurisdiction to evacuate more people from a community in an efficient manner, which reduces the burden on jurisdiction personnel and resources. Failure to organize efficient traffic management efforts increases resource burdens, causes longer evacuation times, could lead to increased accidents and higher congestion, and could leave evacuating residents in vulnerable conditions during an incident. In some cases, roads into and out of a given area are very limited, potentially forming “islands” needing evacuation. The EOP Transportation and Evacuation Annex recommends preparation of a Traffic Control Plan by the Command and General Staff in conjunction with the Public Works agency having jurisdiction during an incident, time permitting. The Traffic Control Plan should contain traffic control points, the responsible agency for providing staffing and operational control, barricade plans (including location and staffing), and potential one-way/reverse lane operations.

Soft and hard road closures are often used to limit access in the evacuation zone. Hard closures are closed to all traffic except fire and law enforcement. Soft closures are closed to all traffic except fire, law enforcement, and critical incident resources (e.g., California Department of Transportation or

those needed to repair or restore infrastructure). In some cases, contraflow lane reversal (typically used on controlled-access highways) is necessary to alter the normal flow of traffic to aid in an emergency evacuation. Contraflow lane reversal roughly doubles the number of lanes available for evacuation traffic. Crossover sections are used to move outgoing traffic to these lanes. All incoming traffic is blocked until the end of the evacuation. A significant number of law enforcement are needed to manually direct traffic during a lane reversal, especially at interchanges, where ramp traffic in the wrong direction must intersect with other roadways that are operating normally.

### Emergency and Evacuation Resources

Alert Monterey County is the official emergency alert and warning system for Monterey County and its municipal jurisdictions. This system delivers critical public safety information to the public from the local government and public safety officials. The Alert Monterey County is managed by the County DEM and administered by Public Safety Answering Points, Law Enforcement, Fire, Public Health, and Emergency Management agencies. Upon signing up for Alert Monterey County, residents may select to receive alerts through landline calls, cell phone text messages, or pre-recorded verbal messages and email. The system also works with telephone devices for the deaf. In addition, Monterey County residents may receive notifications via Wireless Emergency Alerts through push notifications on phones; Emergency Alert System through broadcast satellite providers, cable television systems, and wireless cable systems; and the National Oceanic and Atmospheric Administration Weather Radio through National Oceanic and Atmospheric Administration radios (County DEM 2025).

The County DEM provides several evacuation programs to help Monterey County residents prepare for and participate in the process of evacuations (included as Appendix M):

- **Evacuation Checklist:** As part of the Alert Monterey County program, the DEM provides an Evacuation Checklist focused on evacuation in the event of a wildfire (County of Monterey 2026a).
- **Evacuation Guide:** The DEM also provides an evacuation guide for Monterey County residents. This evacuation guide recommends Monterey County residents make a plan to evacuate with recommendations for actions to take before, during, and after an evacuation (County of Monterey 2026b).
- **Make a Plan:** Steps for making a plan are also provided on the DEM's website (County of Monterey 2026c).
- **Tips for Evacuations:** A flyer with tips for evacuating in emergencies is also available online, provided by the DEM (County of Monterey 2026d).
- **Know Your Zone:** Know Your Zone is a public education campaign implemented by the DEM to inform the residents, businesses, and visitors of Monterey County of the pre-planned evacuation zones (refer to Figure 4.19-3).

### Evacuation Constraints

Due to the rural nature of much of the land in Monterey County, and UMC in particular, there are many areas with unpaved roads, trails, or areas with only one egress route.

The rural nature of UMC, distance between unincorporated communities in UMC, and lack of public transit routes and times limit the ability of residents to evacuate from hazard areas by transit, bicycle, or on foot. The state of the roads throughout Monterey County influences the viability of evacuation infrastructure and presents a potential barrier to evacuation for drivers, bikers, and people taking public transit (i.e., buses). Due to poor road conditions, debris on the roadways, and general maintenance activities, there are short-term and long-term road closures in Monterey County. Major scheduled road and lane closures are provided to the public via the Transportation Agency for Monterey County Cone Zone Report and the Monterey County Public Works Road Traffic Advisories, Closures & Information webpage (TAMC 2026; County of Monterey 2026e). The Traffic Advisories, Closures & Information webpage also includes an interactive web map of road closures.

In addition to poor road conditions and road closures, several areas of UMC are constrained by a lack of access roads, capacity on existing roads, and substantial vehicle congestion on the roads. For instance, the Big Sur coast is only accessed by SR-1 (also known as Highway 1), which is primarily a two-way, two-lane road along this stretch of the coast and is often closed due to natural hazards, such as fires, floods, and debris flows. The primary egress road for Carmel Valley is Carmel Valley Road, which can become substantially congested by vehicle traffic and adversely affect the ability of residents to evacuate this area. Similarly, the S R-68 corridor is a highly congested highway that constrains evacuation access for residents.

### Emergency Access

The County has established several policies related to maintaining adequate emergency access (refer to Section 4.19.1.3). An important consideration for emergency access is providing secondary ingress/egress to residential developments. Single-egress residential developments consist of 30 or more lots in the SRA or a Very High FHSZ in LRA areas without a secondary exit route from the development (PRC 4290.5). According to the California Board of Forestry and Fire Protection, there are a total of 12 existing single-egress residential developments in UMC, most of which are between the communities of Carmel and Aromas.

## 4.19.2.7 Secondary Wildfire Hazards

### Air Pollution

Smoke and air pollution from wildfires can be a health hazard, especially for sensitive populations, including children, older adults, and those with respiratory and cardiovascular diseases. Smoke generated by wildfire contains visible and invisible emissions comprising particulate matter such as

soot and tar; gases such as carbon monoxide, carbon dioxide, and nitrogen oxides; and toxics such as formaldehyde and benzene. Emissions from wildfires depend on the type of fuel, the moisture content of the fuel, the efficiency or temperature of combustion, and the weather. Wildfire may also threaten the health and safety of those fighting the fires. First responders are exposed to the dangers from the initial incident and after-effects from smoke inhalation and heat stroke (County DEM 2022).

### Mudflow and Debris Flow

Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact Monterey County by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Wildfires strip the land of vegetation and destroy forest resources. Exposed soils erode quickly and enhance siltation of rivers and streams, thereby enhancing flood potential, harming aquatic life, and degrading water quality. Wildfires can also bake soils, thus increasing the imperviousness of the ground. This increases the amount and speed of the runoff generated by storm events, further increasing the chance of flooding and mudflow or debris flow. Given that slopes stripped of vegetation are exposed to greater amounts of runoff, this can weaken soils and cause failures on slopes. The soils in a burn scar are highly erodible so floodwaters can contain significant amounts of mud, boulders, and vegetation (County DEM 2022).

The Big Sur area is one of the most landslide-prone stretches of the California coast, with over 1,500 mapped historic large landslides. For example, in 2021, an atmospheric river resulted in a post-fire debris flow washing out a 150-foot-long stretch of SR-1 near Rat Creek below the Dolan Fire burn scar. Flows also damaged another 60 locations along the highway (County DEM 2022).

Besides the Big Sur coastline, other mountainous areas of Monterey County are vulnerable to debris flows. Throughout the 1997–1998 El Niño season, a series of debris slides failed along the northern flank of Saddle Mountain in Carmel Valley and impacted Saddle Mountain Recreation Area. A landslide in Las Lomas in rural north Monterey County caused several homes to be destroyed and resulted in a project that involved buying out the affected homes and preserving the land as perpetual open space. The 2017 storms caused flooding and debris flows in Prunedale and Spreckels, resulting in mud and rocks covering various sections of roadway, including U.S. Route 101, SR-68, Crazy Horse Canyon Road, Live Oak Road, Garin Road, and Elkhorn Road. In 2019, heavy rainfall caused large rocks to block Carmel Valley Road at Laureles Grade. Following the record fires in 2020, annual winter storms in 2021 caused flash floods and debris flows in the River Fire burn scar (County DEM 2022).

Areas of highest susceptibility to large landslides include Carmel Valley, the Arroyo Seco district, and the foothills of southern Salinas Valley, due to weakened rocks through faulting, fracturing, and uplift. As previously mentioned, landslides are most common along the steep slopes of the Big Sur coast. During the winter months, Big Sur receives both heavy rainfall (as much as 80 inches

per year) and high wave energy. In summer and fall, occasional wildfires remove vegetation, making the area's slopes more vulnerable to erosion. Currently, an area of particular concern is the burn scars of the 2020 Dolan, River, and Carmel fires. Structures located anywhere near a burn area should be considered potentially at risk during and following high-intensity rainfall events until the vegetation is restored (County DEM 2022).

An Emergency Stabilization-Burned Area Emergency Response is a rapid assessment of burned watersheds that identifies imminent post-wildfire threats to human life and safety, property, and critical natural or cultural resources. The Emergency Stabilization-Burned Area Emergency Response identifies emergency stabilization measures that can be implemented before the first post-fire damaging events. Emergency Stabilization-Burned Area Emergency Response measures include actions such as mulching, seeding, installation of runoff control structures, temporary barriers to protect recovering areas, and the installation of warning signs. The U.S. Geological Survey also conducts post-fire debris flow hazard assessments for select fires using geospatial data related to basin morphometry, burn severity, soil properties, and rainfall characteristics to estimate the probability and volume of debris flows that may occur in response to a storm (County DEM 2022).

### 4.19.3 Method of Analysis

The analysis of environmental impacts related to wildfire considers the potential for new or increased wildfire risk from implementation of the project, including exposing people or structures to wildfire-related pollutant concentrations or the uncontrolled spread of wildfire, and post-fire risks, such as slope instability or landslides. The analysis also evaluates the effects of the project on emergency planning and evacuation in the event of a wildfire or other natural hazard, as well as any conflicts with existing emergency plans and policies. The analysis contained herein addresses potential wildfire risks from a programmatic-level and Monterey Countywide approach, recognizing that the project will not directly result in construction or new development. Rather, future individual projects at various sites around UMC would be facilitated by the project through identification and rezoning to encourage residential development. Where appropriate and possible, individual opportunity sites are discussed.

The analysis of potential project impacts related to emergency response or emergency evacuation plans includes a quantitative approach that evaluates a conservative estimate of vehicles evacuating areas of Monterey County based on buildout of the reasonable development capacity. Given that the remaining thresholds of significance in this section are primarily based on the location, roadway capacity, and terrain conditions of each site (refer to Section 4.19.4, Thresholds of Significance), this section also evaluates each of the opportunity site parcels to determine impacts related to wildfire.

## 4.19.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on wildfire if in or near SRAs or lands classified as Very High FHSZ, and it would:

- **Threshold 1:** Substantially impair an adopted emergency response plan or emergency evacuation plan.
- **Threshold 2:** Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- **Threshold 3:** Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- **Threshold 4:** Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

In addition, Threshold 7 from Section 4.9, Hazards and Hazardous Materials, has been added as Threshold 5 in this section:

- **Threshold 5:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (Threshold 7 from Section 4.9).

The following Threshold 6 from Section 4.9 is covered by Threshold 1 of this section:

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

## 4.19.5 Project Impacts and Mitigation

The following sections address various potential impacts relating to wildfire that could result from implementation of the project.

### 4.19.5.1 Threshold 1: Emergency Response or Evacuation Plans

**Threshold 1:** Would the project be in or near state responsibility areas or lands classified as Very High FHSZ, and substantially impair an adopted emergency response plan or emergency evacuation plan?

#### Impact Analysis

Future housing enabled under the HEU6 may be vulnerable to wildfire and subject to emergency response and evacuation orders. For example, several opportunity sites are in the Carmel Valley

region, an area that has been subject to multiple historic wildfires. Increasing residential density at sites in SRAs and in LRAs classified as Very High FHSZs, as well as others that lie within the WUI, would increase the number of people who could be affected by future evacuation orders and rely upon existing road corridors for evacuation.

When evacuations are ordered, residents leave affected areas using existing roads and highways. As noted in Section 4.19.2.6, some areas of UMC can have substantial roadway congestion from heavy vehicle traffic, including Carmel Valley Road, which is the primary egress route for residents in the Carmel Valley region, and SR-68. Buildout of the HEU6 would result in a reasonable development capacity of 4,434 housing units, which would increase vehicle traffic and congestion (refer to Section 4.16, Transportation). The increase of vehicle traffic along already congested roadways and highways in the UMC could exacerbate vehicle congestion during emergency evacuations, thereby reducing the efficiency of evacuation operations.

The EOP Transportation and Evacuation Annex divides Monterey County into seven evacuation regions or zones that promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under the threat (refer to Figure 4.19-3). Evacuation regions and zones were collaboratively developed by Monterey County DEM, fire protection districts, and law enforcement agencies representing their respective areas of responsibility and spheres of influence.

To evaluate the number of vehicles that would be added to Monterey County roadways and highways under buildout of the HEU6, this analysis has applied a conservative average of two vehicles per housing unit. The number of opportunity sites, housing units under the reasonable development capacity scenario, and associated vehicles are organized by evacuation region to determine the number of vehicles that would be added to each evacuation region upon buildout of the HEU6 (Table 4.19-5, Number of Vehicles Added by Evacuation Zone). This assumption is consistent with and on the conservative end of the U.S. Census Bureau's data for the average number of vehicles per household in Monterey County (U.S. Census Bureau 2022). The analysis is also conservative for the following three reasons:

- The opportunity sites included in the HEU6 would be developed incrementally rather than simultaneously, resulting in a slower increase in number of vehicles added by the project,
- Evacuation orders would be distributed to prioritize the most vulnerable areas first rather than to evacuate the entire evacuation region at once, and
- Some households would evacuate with only one car for a quicker and easier departure during an emergency scenario.[1]

[1] A study sponsored by the University of California evaluated key evacuation choices of survey respondents impacted by the 2017 October Northern California Wildfires and the 2017 December Southern California Wildfires, as well as the 2018 Carr Wildfire. The results of the survey showed that between 40.5 percent (Northern California Wildfires) and 45.1 percent (Southern California

Evacuation Region A is the region that would be most affected by buildout of the HEU6. Assuming two vehicles per household, buildout of the project under the reasonable development capacity would add 3,968 vehicles to the region. Region C would have the second-highest number of added vehicles (2,570), followed by Region D (986) (Table 4.19-5).

**Table 4.19-5. Number of Vehicles Added by Evacuation Zone**

| Evacuation Region | Number of Opportunity Sites Added to the Evacuation Region | Number of Housing Units Added to the Evacuation Region | Number of Vehicles Added to the Evacuation Region |
|---|---|---|---|
| A | 9 | 1,984 | 3,968 |
| B | 13 | 349 | 698 |
| C | 11 | 1,285 | 2,570 |
| D | 14 | 493 | 986 |
| E | 5 | 128 | 256 |
| F | 0 | 0 | 0 |
| G | 4 | 51 | 102 |

According to the EOP Evacuation and Transportation Annex, the 2020 Wildfires resulted in the evacuation of approximately 35,000 people. Subsequently, the 2021 Winter Storms resulted in post-fire debris and flood flows, prompting the evacuation of approximately 6,000 evacuees. As such, the County Sheriff's Office and other emergency operations personnel are experienced in evacuating large numbers of people during emergency situations.

The EOP is the adopted emergency response plan for Monterey County, and the EOP Transportation and Evacuation Annex is the adopted emergency evacuation plan for Monterey County. The EOP Transportation and Evacuation Annex outlines general evacuation procedures for emergencies in Monterey County. Nevertheless, because wildfire behavior varies dramatically based on location and conditions, specific emergency response and evacuation orders are provided by the Monterey County Sheriff's Office in response to each wildfire event to ensure orderly and timely evacuation of potentially affected residents. In addition, the County DEM is responsible for coordinating organized planning efforts with County departments, local cities, and special districts before and during disasters, as well as maintaining the Operational Area Emergency Operations Center. Law enforcement agencies including the Sheriff's Office, the California Highway Patrol, and local police departments are responsible for implementing emergency evacuations.

As described in Section 4.19.2.6, the decision to evacuate or shelter-in-place is based on an analysis of the situation by public safety and emergency management officials based on the unique

Wildfires) of respondents evacuated with one personal vehicle and between 40.6 percent (Southern California Wildfires) and 43.2 percent (Northern California Wildfires) of respondents evacuated with two personal vehicles. Between 8.6 percent (Southern California Wildfires) and 13.5 percent (Northern California Wildfires) of respondents evacuated with more than two personal vehicles (Wong et al. 2020). Another publication by the University of California, Los Angeles (UCLA) notes that "most existing studies of wildfire evacuations focus on vehicle-owning householders and assume that evacuees will use their vehicles while evacuating. No previous studies have collected near real-time data on transit riders' evacuation behavior or their adaptation behavior immediately post-evacuation, and therefore, research on this group remains sparse." (UCLA 2025).

conditions of the specific incident. Public safety and emergency management professionals first complete an incident analysis that considers the nature of the hazard (i.e., magnitude, source, and expected duration), weather and environmental conditions, at-risk populations (including numbers, demographics, special needs, and transportation requirements), and the geography and infrastructure at risk before determining the location of populations who need to be evacuated and the priority for conducting evacuations. Following this incident analysis and decision to evacuate is the process of notifying agencies, people, and systems to mobilize resources to conduct the evacuations, including incident command and management structures, public works, transportation, care and shelter, etc. Notification messages are then developed, coordinated, and delivered from initial evacuation operations to return and recovery operations.

The enforcement agencies and County departments described above have established various communication pathways to inform the public of emergencies and recommended protective actions, such as evacuations and sheltering in place. These pathways are frequently used concurrently to amplify emergency information throughout the community and reach vulnerable individuals who may need additional information and resources to take action, including people with disabilities, people with access and functional needs, commuters, and visitors. During emergencies, the Sheriff's Office and other County departments may disseminate emergency notifications through landline calls, cell phone text messages, or pre-recorded verbal messages, email, telecommunications devices for the deaf and hearing-impaired, Wireless Emergency Alerts, Emergency Alert System messages, and the National Oceanic and Atmospheric Administration Weather Radio. Notifications may also be delivered directly to residents via door knocks and evacuation sirens on law enforcement vehicles. Incident information can also be posted on the County's emergency preparedness website: www.readymontereycounty.org/emergency, shared on social media platforms (e.g., X and Facebook), through print, radio, and TV media, and accessed through 2-1-1 and Call Center hotlines. The project would not impair these established communication pathways for emergencies in Monterey County.

Additionally, compliance with existing regulatory requirements related to emergency access and evacuation would ensure adequate emergency access is provided for new residential development associated with future development. For instance, all residential development in the UMC would be subject to the CFC, Chapters 18.09 and 18.56 of the County Code, and policies of the 2010 General Plan Safety Element, which require adequate and unobstructed emergency access for fire department apparatus and personnel to buildings, structures, hazardous occupancies, or other premises. Compliance with all applicable state and local design standards and regulations would be required to be shown on development plans and permit applications for review and approval by County Housing & Community Development Building Services and, in SRAs, the Director of the Board of Forestry and Fire Protection or their designee, including local fire districts. Specifically, Section 19.10.090 of the County Code requires designs for adequate turnaround areas for emergency vehicles and adequate emergency access to the satisfaction of the local fire district

and/or CAL FIRE. Section 18.56.060 of the County Code provides standards for roadway width, surface, grades, radius, turnarounds, and turnouts in SRAs to provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently. Additionally, Section 18.56.070 of the County Code regulates signing, property addresses, and building numbering in SRAs to facilitate locating a fire and to avoid delays in emergency response time. Policy S-4.24 of the Safety Element requires property addresses to be posted in accordance with Chapter 18.56 of the County Code. Similarly, Policies S-4.16 and S-4.19 of the Safety Element require new or reconstructed bridges and all gates on emergency access roadways to be constructed in accordance with Chapter 18.56 of the County Code and the CFC, as amended. Policy S-6.7 of the Safety Element also requires public safety measures, including sequential house numbering, non-repetitive street naming, standardized lettering of house numbers in subdivision design, lighting, and park designs, that allow for adequate view of residences from streets. Specific Policies 2.8.3.C.5 of the North County Land Use Plan (Coastal) and Specific Policies 2.7.4 of the Carmel Area Land Use Plan similarly require adequate roadways for emergency vehicles and visible house numbers. Further, Policy S-5.9 of the Safety Element requires more than one access route for emergency response and evacuation for new residential development of three units or more unless exempted by the fire jurisdiction. These regulations ensure new development provides adequate access during a wildfire to allow emergency response and evacuation of the site. All existing roadway modifications and new roadways that could occur with implementation of the project must be constructed based on state and County design standards. Therefore, the project would not substantially impair emergency access and evacuation or implementation of the EOP Transportation and Evacuation Annex.

Residents in single-egress residential developments face greater wildfire hazard risk due to the lack of options for evacuation in the event of a wildfire and the potential for a wildfire to impede access to the sole evacuation route. As described in Section 4.19.2.6, the California Board of Forestry and Fire Protection identified single-egress residential developments that consist of at least 30 lots in the SRA or a Very High FHSZ in the LRA without a secondary exit route from the development (PRC 4290.5). According to the California Board of Forestry and Fire Protection, Monterey County has 12 existing single-egress residential developments of 30 lots or greater. However, as previously described, new development associated with the project would be required to comply with all applicable regulations related to emergency access and evacuation.

The County's established and ongoing planning efforts for emergency response and evacuation take into consideration the location, density, and use types of existing and future development in Monterey County. These planning efforts would also consider the location, density, and use types of any future residential growth resulting from the buildout of the HEU6 (refer to Table 4.14-6 in Section 4.14, Public Services, which shows whether the emergency response standard would be met based on the distance of each opportunity site to its responding fire station). The project includes a rezoning effort of all opportunity sites to HDR/25 and HDR/30, which do not allow for

unique or unusual uses that would involve non-typical evacuation efforts (e.g., evacuation of horses). As a result of future residential growth, the County Sheriff's Office may issue more conservative emergency evacuation orders (e.g., evacuation orders that are provided earlier and extended farther); however, any future emergency response or emergency evacuation would continue to be carried out under the existing emergency response and evacuation plans (i.e., the Monterey County EOP and EOP Transportation and Evacuation Annex, respectively).

To reduce potential impacts related to the increase of additional vehicles on roadways and highways during evacuations, Mitigation Measure (MM)-WF-OBJ-1 and MM-WF-CONS-2 would require developments streamlining under the Objective Process and Consistency Process to submit an evacuation map packet for review by the County in coordination with the fire authority having jurisdiction. The evacuation map packet would need to include the proposed housing site, all points of egress, distance to a high-capacity roadway or highway, potential evacuation routes with their roadway classifications, and the estimated population of the housing site. Additionally, MM-WF-OBJ-3 and MM-WF-CONS-4 would require developments to disseminate evacuation educational materials included in Appendix M to this PEIR to tenants/buyers as part of move-in materials. This information would increase public awareness of evacuation procedures and tips for evacuation to help residents be prepared. It is acknowledged that the implementation of MM-WF-OBJ-3 and MM-WF-CONS-4 would be limited, due to the feasibility of disseminating materials without a homeowners association or other entity to ensure dissemination of materials to residents, and the difficulty of enforcing implementation of the mitigation, particularly during subsequent sales of the properties. However, as described above, all future development under the HEU6 would be required to comply with state and County requirements for emergency access and evacuation, including the requirement for providing at least two points of egress. With implementation of MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4, as well as compliance with all applicable regulations pertaining to emergency access and evacuation, the project would not impair an emergency response plan or emergency evacuation plan, and impacts would be less than significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Preparation and submittal of an evacuation map packet and dissemination of evacuation educational materials will be required for all projects streamlining under the HEU6 through MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4 below. The by-right housing ordinance requires implementation of MM-WF-OBJ-1 and MM-WF-OBJ-3 for future by-right development projects that will be streamlined under the Objective Process.

**MM-WF-OBJ-1: Evacuation Map Packet.** Applicants for by-right residential developments streamlining under the Objective Process shall be required to submit an evacuation map packet as part of the development application for review by the County of Monterey (County) in coordination with the fire authority having jurisdiction. The evacuation map packet for the residential development shall be required to include the following:

- A map of the proposed housing site;
- All (at least two) points of egress from the proposed housing site;
- The distance from the proposed housing site to a high-capacity roadway (i.e., arterial road) or highway;
- Potential evacuation routes with their roadway classifications; and
- Estimated population of the proposed housing site.

**MM-WF-CONS-2: Evacuation Map Packet.** Applicants for developments streamlining under the Consistency Process shall be required to prepare and submit an evacuation map packet as part of the development application for review by the County of Monterey (County) in coordination with the fire authority having jurisdiction. The evacuation map packet for the residential development shall include the following:

- A map of the proposed housing site;
- All (at least two) points of egress from the proposed housing site;
- The distance from the proposed housing site to a high-capacity roadway (i.e., arterial road) or highway;
- Potential evacuation routes with their roadway classifications; and
- Estimated population of the proposed housing site.

**MM-WF-OBJ-3: Evacuation Educational Materials.** Applicants for by-right residential developments on opportunity sites shall be required to provide the evacuation educational materials included in Appendix M to this Program Environmental Impact Report (PEIR) to tenants/buyers as part of move-in materials. The County of Monterey (County) shall make this a standard condition of approval for developments on all opportunity sites. The evacuation educational materials for the residential development shall be required to include the following:

- The County Department of Emergency Management's (DEM's) Evacuation Checklist;
- DEM's Evacuation Guide;
- The list of steps for making a household emergency plan;

- DEM's flyer with tips for evacuating in emergencies; and
- The web address and summary of the Know Your Zone campaign to inform residents, businesses, and visitors of Monterey County of the pre-planned evacuation zones.

**MM-WF-CONS-4: Evacuation Educational Materials.** Applicants for developments streamlining under the Consistency Process shall be required to provide the evacuation educational materials included in Appendix M to this Program Environmental Impact Report (PEIR) to tenants/buyers as part of move-in materials. The County of Monterey (County) shall make this a standard condition of approval for developments on all opportunity sites. The evacuation educational materials for the residential development shall be required to include the following:

- The County Department of Emergency Management's (DEM's) Evacuation Checklist;
- DEM's Evacuation Guide;
- The list of steps for making a household emergency plan;
- DEM's flyer with tips for evacuating in emergencies; and
- The web address and summary of the Know Your Zone campaign to inform residents, businesses, and visitors of Monterey County of the pre-planned evacuation zones.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.19.5.2 Threshold 2: Pollutant Concentrations

**Threshold 2:** Would the project be in or near state responsibility areas or lands classified as Very High FHSZ, and due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

### Impact Analysis

Nearly 85 percent of wildland fires in the United States are caused by humans. Human-caused fires result from campfires left unattended, the burning of debris, equipment use and malfunctions, negligently discarded cigarettes, and intentional acts of arson (National Park Service 2022). In addition, new residential development in wildfire hazard areas and the WUI may exacerbate wildfire ignition risks due to increased human activity, potentially combustible building materials used in home construction, flammable landscaping and natural vegetation fuel sources, and buildings on or adjacent to existing steep slopes. Further, new development in areas subject to high winds may exacerbate pollution exposure from wildfire smoke. As such, the construction and

occupancy of new residential and mixed-use development in or near designated Very High FHSZs and WUI areas would increase the potential for wildfire ignition and wildfire risks, including loss of life, exposure to harmful pollutants, and destruction of property and environmental resources.

Implementation of the project would result in the development of housing in and adjacent to Very High FHSZs and the designated WUI, particularly in the Carmel Valley, Carmel, Fort Ord, and Greater Monterey Peninsula planning areas (refer to Figures 4.19-1a through 4.19-1i and Figures 4.19-2a through 4.19-2i). For example, Opportunity Sites 23, 36, 55, and 56 are in both Very High FHSZ and WUI areas nestled between the Santa Lucia Range adjacent to undeveloped sloped areas with highly combustible vegetation. Other opportunity sites in or near Very High FHSZ include Opportunity Sites 16, 18, 24, 37, 38, 40, 43, 45 through 48, 55, and 56 (refer to Table 4.19-1 and Figures 4.19-1a through 4.19-1i). In addition, the project would result in the development of 31 opportunity sites within, partially within, and adjacent to slopes greater than 25 percent (refer to Table 4.19-3). In the event of a wildfire in the WUI and steep slope areas, nearby residents would be vulnerable to wildfire pollution concentrations and the direct effects of uncontrolled wildfire on life and property.

However, future development enabled under the project would be required to comply with the applicable fire safety requirements that help to reduce wildfire risks and the exposure of people to uncontrollable wildfire spread. These include the IFC, IBC, CFC, CBC, PRC, Title 18 of the County Code, and policies of the 2010 General Plan Safety Element, Area and Master Plans, Community Plans, and Land Use Plans, which address the siting, construction, occupancy, and protection of development and people as it relates to wildfire hazards (refer to Section 4.19.1, Regulatory Setting). Future residential development would be required to include fire protection measures, such as automatic sprinkler systems, fire detection and alarm systems, fire breaks, fire-retardant building materials, fuel modification measures, water storage tanks, alternative access routes, and adequate emergency access; thereby reducing the risk of damage from fire.

Specifically, Policies S-4.21 and S-4.22 of the Safety Element require all new development facilitated under the project to be constructed to meet the minimum requirements specified in the most recent CBC, CFC, County Code, Chapter 18.56, and other nationally recognized standards and incorporate requirements of the fire authority having jurisdiction. Policy S-4.11 of the Safety Element requires that all new development would be required to provide automatic fire protection systems, such as fire breaks, fire-retardant building materials, automatic fire sprinkler systems, or water storage tanks, as approved by the fire jurisdiction. Policy S-4.31 of the Safety Element requires new development in fire hazard areas to include a zone that can inhibit the spread of wildfire, such as irrigated greenbelts, streets, or fuel modification zones, and Policy S-4.32 of the Safety Element requires property owners in high, very high, and extreme fire hazard areas to prepare a Fuel Modification Zone plan in conjunction with permits for new structures, subject to approval and to be performed in conjunction with CAL FIRE and other fire protection agencies.

Furthermore, Policy S-4.15a of the Safety Element requires that all new development be annexed into the appropriate fire district. Where no fire district exists, applicants are required to provide verification from the most appropriate local fire authority of the fire protection services that exist. Project approvals require a condition for a deed restriction notifying the property owner of the level of service available and acceptance of associated risks to life and property. Where annexations are mandated, the County is required to negotiate a tax share agreement with the affected fire protection district. Additionally, Policy S-4.7 of the Safety Element requires the County and authorities having jurisdiction to develop and maintain a procedure to inform potential developers of the requirements for development in high and very high fire hazard areas, and that this information is made available through the County Housing & Community Development Department.

Chapter 18.09.030 of the County Code establishes local amendments to the 2025 CFC, which include design standards, requirements, and standard fire conditions for development. For example, Appendix R, Roofs, Section R101, General, includes a requirement that all roofs for new buildings in Very High FHSZs shall be a minimum of Class "A" roof assembly as defined by the IBC.

Sections 20.64.230 and 21.64.230 of the County Code establish regulations for all proposed development on slopes in excess of 30 percent. These sections encourage avoidance of development and require a Use Permit or Coastal Development Permit for all development on these slopes, as well as identify allowable development and conditions for development. Similarly, 2010 General Plan Policy OS-3.5 applies a more restrictive standard prohibiting development without a discretionary permit on slopes greater than 25 percent. The County applies this more restrictive standard to regulate development on steep slopes in inland areas of the UMC. Additionally, a waiver from the Chief of Planning is required for proposed development on steep slopes in North County LUP area (25 percent) and Carmel LUP area (30 percent). As such, projects streamlining under the Objective Process would not be able to develop on slopes in excess of 25 percent (or 30 percent in the Carmel LUP area) to maintain an objective permitting process. To avoid requiring a Use Permit or Coastal Development Permit for projects that are eligible for streamlining under the Objective Process, MM-WF-OBJ-5 includes objective standards consistent with Section 21.64.230(C)(2)(b-c) of the County Code for these projects that are on steep slopes. Projects that streamline under the Consistency Process would be subject to requirements for development on steep slopes in Sections 20.64.230 and 21.64.230 of the County Code, 2010 General Plan Policy OS-3.5, the North County LUP, and/or the Carmel LUP, as applicable.

Specifically in SRAs, Section 4291(a) of the PRC requires a minimum of 100 feet of defensible space around all residential, commercial, and industrial buildings, and Chapter 18.56 of the County Code provides design standards and regulations for emergency access, adequate signing and building numbering, emergency water supply, and fuel modifications as wildfire protection measures. Section 18.56.040 outlines requirements for review of development permit applications for compliance with applicable regulations and any recommendations of the Reviewing Authority

(Director of the Board of Forestry and Fire Protection, or their designee, including local fire districts, sharing jurisdiction in SRAs) prior to development, as well as inspection of the development for compliance with all applicable regulations and fire conditions.

All new water supply systems must comply with County Code, Chapter 18.56, NFPA Standard 1142, or other nationally recognized standard, and must be reviewed by the fire authority having jurisdiction, the County Departments of Planning and Building Services, and all other regulatory agencies to determine the adequacy and location of water supply and storage to be provided (Policy S-4.13 of the Safety Element). Further, Policy S-4.14 of the Safety Element requires water systems constructed, extended, or modified to serve a new land use or a change or intensification of land use to be designed to meet peak daily demand and recommended fire flow.

In addition, landscaping associated with new residential developments could increase flammable vegetation in proximity to homes and other fuels. However, the County Code and 2010 General Plan Safety Element include several policies intended to ensure that all new landscaping is fire-safe. For example, Section 16.63.070(B)(8) of the County Code requires landscape planting to include the use of fire-resistant plant species and be consistent with fire-safe landscaping required by the designated fire district and, as applicable, Chapter 18.56 of the County Code. All minor and major landscape packages are required to be submitted to the Chief of Planning for review and approval prior to County issuance of a grading permit, building permit, or design approval in accordance with Sections 16.63.050 and 16.63.060 of the County Code. To facilitate development compliance with these sections of the County Code, the County provides a list of acceptable fire-resistant plants and plants that should not be used in landscaping on the County's website (County of Monterey 2022b).

Collectively, these codes and regulations, as specified above, would reduce the risk of the uncontrolled spread of a wildfire and associated pollutant concentrations that would result from new development facilitated by the project. Because Section 18.56.040 of the County Code outlines requirements for a discretionary approval process in which the Reviewing Authority provides recommendations for development permit applications based on fire conditions, this review would need to be completed prior to the County application process for by-right projects on opportunity sites in the SRA that are streamlining under the Objective Process. MM-WF-OBJ-6 would ensure that developments on opportunity sites in the SRA streamlining under the Objective Process comply with all applicable regulations of Chapter 18.56 of the County Code and other state and local ordinance code and requirements to reduce wildfire risk (e.g., PRC Section 4291). MM-WF-OBJ-6 would also require that development permit applications be submitted to the Board of Forestry and Fire Protection (or their designee) for review and approval, and documentation of this approval shall be provided to the County prior to the County's approval of the building permit to ensure an objective permitting process. Consistency Process residential projects in the SRA would also be required to comply with all applicable laws and regulations

related to fire hazards and follow the discretionary permitting process in accordance with Section 18.56.040 of the County Code through implementation of a CEQA Guidelines, Section 15183, exemption checklist. With existing federal, state, and local regulatory requirements for development as well as implementation of MM-WF-OBJ-5 and MM-WF-OBJ-6, implementation of the project would result in a less than significant impact related to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

### Significance of Impact

Potentially significant impact.

### Mitigation Measure

To avoid requiring a use permit or coastal development permit for projects that are eligible for streamlining under the Objective Process and located on slopes greater than 25 percent (or 30 percent in the Carmel LUP area), MM-WF-OBJ-5 includes objective standards consistent with Section 21.64.230(C)(2)(b-c) of the County Code.

Given that the Objective Process includes an objective permitting process by the County, the review process outlined under Section 18.56.040 of the County Code must be completed prior to the County application process for by-right projects in the SRA, as described in MM-WF-OBJ-6 below.

**MM-WF-OBJ-5: Steep Slope Requirements.** The applicant shall demonstrate on grading and construction plans that the proposed development is not located on steep slopes, defined as in excess of 25 percent (or 30 percent in the Carmel Land Use Plan area). If the project cannot avoid development on steep slopes, a geotechnical report shall be prepared and submitted to the County of Monterey (County) at the time of application submittal. The geotechnical report shall contain evidence of compliance with the following objective standards, consistent with Section 20.64.230(C)(2)(b-c) (Coastal) or Section 21.64.230(C)(2)(b–c) (Inland) of the County Code:

- For excavations on human-made slopes:
  - The excavation shall not exceed 100 cubic yards;
  - The excavation shall not exceed 2 feet in depth; and
  - The excavated slope shall not be steeper than the one and one-half horizontal to one vertical;
- For fills on human-made slopes:
  - The fill shall contain earth material only;
  - The fill shall not exceed 100 cubic yards;

- The fill shall not exceed 2 feet in depth; and
- The fill shall not be placed on a human-made slope in excess of one and one-half horizontal to one vertical.

If the applicant cannot show compliance with the objective standards listed above, the project would not be eligible for streamlining under the Objective Process and may streamline under the Consistency Process instead. Under the Consistency Process, an applicant shall demonstrate compliance with Section 20.64.230 (Coastal) or Section 21.64.230 (Inland) prior to issuance of a grading or construction permit.

At time of application submittal, grading and construction plans shall be submitted to the fire authority that has jurisdiction for review. The County shall verify that the grading and construction plans demonstrate that the proposed development is either not located on steep slopes or demonstrates compliance with the objective standards listed above.

**MM-WF-OBJ-6: State Responsibility Area Regulation Compliance.** By-right development projects on opportunity sites in the state responsibility area (SRA) shall be required to comply with the development standards and requirements established under state law (California Government Code, Sections 51175–51189, California Public Resources Code, Sections 4290, 4291, and 4427), applicable policies of the 2010 and 1982 Monterey County General Plans and relevant Area/Master and Community Plans, and relevant Local Coastal Program – Land Use Plans, as well as the County Code (Sections 18.56.050 through 18.56.090). Section 18.56.050 explains the exceptions and regulations for alternative standards or measures. Section 18.56.060 includes development standards for emergency access. Section 18.56.070 includes development standards for signing and building numbering. Section 18.56.080 includes development standards for emergency water systems. Section 18.56.090 includes fuel modification standards to reduce the volume and density of flammable vegetation. Compliance with Sections 18.56.050 through 18.56.090 of the County Code shall be shown on relevant project plans.

By-right residential developments on opportunity sites in the SRA shall be required to submit development permit applications showing compliance with applicable development standards and requirements to the California Board of Forestry and Fire Protection (or their designee) for review and approval. This review process must be completed prior to the County's approval of the entitlement (e.g., tentative map approval) to ensure an objective permitting process. The County shall verify that the development application materials include documentation of the California Board of Forestry and Fire Protection's (or their designee's) review and approval.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

### 4.19.5.3 Threshold 3: Installation or Maintenance of Associated Infrastructure

**Threshold 3:** Would the project be in or near state responsibility areas or lands classified as Very High FHSZ, and require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

### Impact Analysis

As described in Table 2-2 in Chapter 2, Environmental Setting, 20 of the opportunity sites are considered vacant, and 36 of the opportunity sites are considered non-vacant. However, the non-vacant portion of the majority of these sites represents only a portion of the overall site. For instance, each non-vacant site may still have a large portion of undeveloped land. Therefore, future housing development under implementation of the project would likely require the installation or maintenance of associated infrastructure to facilitate housing development (e.g., roads and driveways, power lines, and other utilities) that could result in ongoing impacts on the environment. Similarly, fire protection facilities, including fuel breaks, emergency access roads, or emergency water, may also be required.

Future development, particularly in high fire risk areas of Monterey County, would be required to comply with existing regulations developed by the state (e.g., CFC, CBC, PRC) and County (e.g., County Code, 2010 General Plan Safety Element, Area and Master Plans, Community Plans, Local Coastal Program – Land Use Plans), which include various provisions for siting, construction, occupancy, and protection of development as it relates to wildfire hazards and reducing wildfire risks, wildfire exposure, and the uncontrolled spread of wildfires (refer to Section 4.19.1, Regulatory Setting). As discussed in Section 4.19.5.2, the development regulations and construction of infrastructure necessary to comply with these regulations would reduce the overall risk of wildfire hazards and associated impacts. These required improvements, however, could have adverse effects on biological, cultural, and Tribal Cultural Resources. For example, the required infrastructure improvements for residential development (e.g., roads, utilities) and wildfire prevention and preparedness measures (e.g., fuel breaks, emergency water supply tanks) may have adverse impacts on key resources found in the WUI and High/Very High FHSZ areas in the UMC. As described in Section 4.4, Biological Resources, improvements associated with future residential development may result in temporary or ongoing secondary impacts related to vegetation removal, loss of sensitive habitats, and disturbance or loss of special-status species. Additionally, as described in Section 4.5, Cultural Resources, the construction or maintenance of this development would result in ground disturbance that could disturb known or unknown buried cultural resources. As a result, the installation or maintenance of infrastructure associated with the

project could have potentially significant temporary or permanent impacts on the environment. This is a potentially significant impact.

Implementation of MMs identified in Section 4.4, Section 4.5, and Section 4.17, Tribal Cultural Resources, would reduce impacts related to biological resources, cultural resources, and Tribal Cultural Resources. Therefore, with implementation of these mitigation measures, the installation or maintenance of infrastructure associated with the project would not substantially exacerbate fire risk or result in temporary or ongoing impacts on the environment.

### Significance of Impact

Potentially significant impact.

### Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 in Section 4.4.

Refer to MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, MM-CUL-CONS-4, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 in Section 4.5.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.19.5.4 Threshold 4: Flooding or Landslides

**Threshold 4:** Would the project be in or near state responsibility areas or lands classified as Very High FHSZ, and expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

### Impact Analysis

As described in Section 4.19.2.6, the lack of vegetation and highly erodible soils in a burn scar can cause significant amounts of mud, boulders, and vegetation to be carried by floodwaters, resulting in mudflow and debris flow. Areas of particular concern for risk of post-fire flooding or landslides include structures and roadways located anywhere near a recent burn area. However, mudflows and debris flows have the potential to occur Monterey Countywide wherever heavy rain occurs on steep, exposed slopes, particularly following wildfires. This is particularly common along and south of the Big Sur coast, where forested areas in the FRAs or SRAs designated as Very High FHSZs have steep slopes that extend down to cliffs along the coastline.

As previously described, several of the opportunity sites are in or near Very High FHSZs (Figures 4.19-1a through 4.19-1i and Table 4.19-1), the WUI (Figures 4.19-2a through 4.19-2i and Table

4.19-2), and steep slopes (Table 4.19-3) and would therefore face a higher risk of wildfire and potential post-wildfire hazards, such as flooding, mudflow, and debris flow. However, places that are most susceptible to debris flow consist of areas downslope of steep WUI areas (refer to Figures 4.19-1a through 4.19-1i and Figures 4.19-2a through 4.19-2i), near drainage corridors, and within expanded floodplains (refer to Figures 4.10-2a through 4.10-2i). Several of the opportunity sites are in areas that are prone to post-fire flooding, mudflow, or debris flow. For example, sites in the Carmel and Carmel Valley planning areas are along the Carmel River, within and near steep topographic areas associated with the Santa Lucia Range. As previously described, there are 31 opportunity sites that are within, partially within, or adjacent to areas of 25 percent slope or greater and could be prone to post-fire flooding, mudflow, or debris flow (refer to Table 4.19-3). Other opportunity sites are generally located away from Very High FHSZs or steep topographic areas, and, therefore, are not at risk of flooding, mudflow, or debris flows from a post-fire flood event.

As previously discussed, all potential future development in wildfire-prone areas in the UMC would also be required to comply with CFC, CBC, PRC, and other state and local regulations addressing the development and design of habitable structures to safeguard public health and reduce fire hazards. All future residential development, including at opportunity sites in the Carmel and Carmel Valley planning areas, would be required to follow standards and practices aiming to prevent post-wildfire hazards, such as those in Title 18 of the County Code and 2010 General Plan Safety Element, which require existing and new development to be adequately protected from potential flooding or landslides through careful site planning, design, and construction (refer to Section 4.19.1). For example, Policies S-2.1, S-2.7, S-2.8, and S-2.9 of the Safety Element aim to minimize development within the floodplain and flood-prone areas. Policies S-2.5, S-2.6, S-2.10, and S-2.11 of the Safety Element require mitigations (e.g., building elevation) for development in the floodplain. Further, Policy S-4.19 of the Safety Element requires drainage details for roads and driveways to conform to current engineering practices, including erosion control best management practices. Both the North County Land Use Plan (Coastal) and Carmel Area Land Use Plan require development siting and design as well as preparation of an environmental report for development in high hazard areas to minimize risk from geologic, flood, or fire hazards. Additionally, North County (Part 2) Section 20.144.100 and Carmel Area (Part 4) Section 20.146.080 of the Coastal Implementation Plan provide development standards that regulate land uses and development in areas of high geologic, flood, and fire hazards to minimize risks to life and property and damage to the natural environment. Sections 20.64.230 and 21.64.230 of the County Code, as well as 2010 General Plan Policy OS-3.5, establish regulations for all proposed development on slopes in excess of 25 percent. These sections encourage avoidance of development and require a use permit for all development on these slopes, as well as identifying allowable development and conditions for development. These sections would apply to projects that qualify for streamlining under the Consistency Process. For projects that qualify for streamlining under the Objective Process, MM-

WF-OBJ-5 includes objective standards consistent with Section 21.64.230(C)(2)(b-c) of the County Code to avoid hazards related to development on steep slopes.

In addition, as discussed in Section 4.10, Hydrology and Water Quality, future development associated with the project would be subject to stormwater management regulations, which require structural stormwater control measures (e.g., retention basins and stormwater conveyance infrastructure) to be adequately sized for substantial rainfall events. Additionally, development within floodplains is subject to the requirements of Chapter 16.16, Regulations for Floodplains in Monterey County, of the County Code, which regulates development in special flood hazards areas. The County requires review of all development permit applications subject to Chapter 16.16 of the County Code to determine that all federal, state, and local requirements are met, and if the proposed development adversely affects the flood capacity of the area. As a result, impacts relating to flooding were determined to be less than significant in Section 4.10, and impacts related to post-wildfire hazards would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measures

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.19.5.5 Threshold 5: Risk of Loss, Injury, or Death

**Threshold 5:** Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

### Impact Analysis

As described under Section 4.19.5.2, new residential development in wildfire hazard areas, the WUI, and on or near steep slopes could expose people and structures to wildfire hazards, including risk of loss, injury, or death. Implementation of the project would result in the development of housing within and adjacent to Very High FHSZs and the designated WUI, including Opportunity Sites 16, 18, 23, 24, 36, 37, 38, 40, 43, 45 through 48, 55, and 56 (refer to Figures 4.19-1a through 4.19-1i and Table 4.19-1). In addition, the project would result in the development of housing within, partially within, and adjacent to slopes 25 percent or greater, as shown in Table 4.19-3. Future development at these sites has a higher risk for exposure to wildfires than development in other areas of Monterey County (e.g., urban built environments). As described above, Sections 20.64.230 and 21.64.230 of the County Code, as well as 2010 General Plan Policy OS-3.5,

establish regulations for all proposed development on slopes in excess of 25 percent. These sections encourage avoidance of development and require a use permit for all development on these slopes, as well as identifying allowable development and conditions for development. These sections would apply to projects that qualify for streamlining under the Consistency Process. For projects that qualify for streamlining under the Objective Process, MM-WF-OBJ-5 includes objective standards consistent with Section 21.64.230(C)(2)(b-c) of the County Code to avoid hazards related to development on steep slopes.

In addition, future development enabled under the project would be required to comply with the applicable fire safety requirements that help to reduce wildfire risks and the exposure of people to uncontrollable wildfire spread. These include the IFC, IBC, CFC, CBC, PRC, Title 18 of the County Code, and policies of the 2010 General Plan Safety Element, Area and Master Plans, Community Plans, and Local Coastal Program – Land Use Plans, which address the siting, construction, occupancy, and protection of development and people as it relates to wildfire hazards (refer to Section 4.19.1). For example, future residential development would be required to include fire protection measures, such as automatic sprinkler systems, fire detection and alarm systems, fire breaks, fire-retardant building materials, fuel modification measures, fire-resistant landscaping, adequate water supply, appropriate signage and building numbering, alternative access routes, and adequate emergency access. Refer to Section 4.19.5.2 for further discussion of state and local fire prevention and protection regulations that would apply to future development facilitated by the project. Additionally, MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4 would reduce potential impacts associated with increased roadway congestion during emergency evacuations, and MM-WF-OBJ-5 and MM-WF-OBJ-6 ensure that Objective Process by-right housing developments comply with the regulations for fire safety that apply to Consistency Process projects. Collectively, these codes, regulations, and mitigations would reduce the risk of loss, injury, or death from wildfire for new residential developments potentially resulting from the project. Therefore, with existing regulatory requirements and previously identified mitigations, implementation of the project would result in a less than significant impact related to exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

### Significance of Impact

Potentially significant impact.

### Mitigation Measure

MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, MM-WF-CONS-4, MM-WF-OBJ-5, and MM-WF-OBJ-6 would apply.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.19.6 Cumulative Impacts

The following sections address various potential cumulative impacts relating to wildfire that could result from implementation of the project. Refer to Chapter 4, Environmental Analysis, for further discussion of the methodology used for the cumulative analysis.

### 4.19.6.1 Cumulative Threshold 1: Emergency Response or Evacuation Plans

Cumulative impacts on emergency response or evacuation plans could occur if the project, in combination with other cumulative projects, substantially impaired implementation of emergency response or evacuation efforts in Monterey County. As described in Section 4.19.5.1, buildout of the project under the reasonable development capacity would add 3,968 vehicles to Evacuation Region A. This region also includes several incorporated cities (i.e., Cities of Marina, Sand City, Del Rey Oaks, Monterey, Del Monte Forest, and Carmel-by-the-Sea) that are planning for residential growth in their respective Housing Elements of their comprehensive General Plans in accordance with their Regional Housing Needs Allocations. With implementation of MM-WF-OBJ-1, MM-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4, all residential projects streamlining under the HEU6 would require the preparation and submittal of an evacuation map packet and the dissemination of evacuation educational materials. Just as future development facilitated by the project would be required to comply with the state and County requirements for adequate emergency access, it is reasonable to assume that cumulative projects would be subject to the same or similar standards. Therefore, emergency response and evacuation would be addressed on a project-by-project basis, with each potential project complying with regional and local access requirements. With implementation of the project mitigation measures and compliance with state and County requirements for adequate emergency access, the project would not contribute to impairment of an emergency response or evacuation plan. Therefore, cumulative impacts on emergency response and evacuation would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measure

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.19.6.2 Cumulative Threshold 2: Pollutant Concentrations

Cumulative projects, in combination with future development facilitated by the HEU6, in the WUI, in High or Very High FHSZs, and on steep slopes could result in an increase in the risk of ignitions. Each cumulative project requiring development permits would likely undergo design review to determine what, if any, fire protection measures would be required for the project, depending on the site-specific location. For example, future residential development in the UMC would be required to include fire protection measures, such as automatic sprinkler systems, fire detection and alarm systems, fire breaks, fire-retardant building materials, fuel modification measures, fire-resistant landscaping, adequate water supply, appropriate signage and building numbering, alternative access routes, and adequate emergency access. For the same reasons as the project, cumulative project compliance with state and local fire protection requirements and standards would reduce the risk of the uncontrollable spread of wildfire and associated pollutant concentrations. The project includes mitigation measures to ensure that Objective Process by-right housing developments comply with the same regulations for fire safety that apply to Consistency Process projects (i.e., MM-WF-OBJ-5 and MM-WF-OBJ-6). Therefore, the project's contribution to cumulatively considerable impacts related to fire risk would be less than significant.

##### Significance of Impact

Potentially significant impact.

##### Mitigation Measure

MM-WF-OBJ-5 and MM-WF-OBJ-6 would apply.

##### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.19.6.3 Cumulative Threshold 3: Installation or Maintenance of Associated Infrastructure

Cumulative projects, in combination with future development facilitated by the HEU6, in the WUI, in High or Very High FHSZs, and on steep slopes would require development of associated infrastructure and could exacerbate fire risk by increasing the risk of ignitions. However, the opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and already identified growth areas and to avoid sprawl or haphazard development. Each cumulative project requiring development permits would likely undergo design review to determine what, if any, fire protection measures would be required for the project, depending on the site-specific location. For the same reasons as the project, cumulative project compliance with state and local fire protection requirements and standards would reduce fire risk.

Although the implementation of the project and cumulative projects could result in ongoing impacts on the environment, such as impacts on biological, cultural, and Tribal Cultural Resources, as with implementation of the project, other cumulative projects are also anticipated to be required to implement applicable mitigation measures for biological resources, cultural resources, and Tribal Cultural Resources to reduce impacts to less than significant levels. Therefore, cumulative impacts on the environment from the installation or maintenance of infrastructure associated with the project would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measure

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 in Section 4.4.

Refer to MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, MM-CUL-CONS-4, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 in Section 4.5.

### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

#### 4.19.6.4 Cumulative Threshold 4: Flooding or Landslides

All development, including future residential development facilitated by the HEU6 and cumulative projects, in areas downslope of steep WUI areas, near drainage corridors, and within expanded floodplains are susceptible to wildfire and potential post-wildfire hazards, such as flooding and landslides. As described in Section 4.10, cumulative projects, in combination with future development facilitated by the HEU6, would result in an incremental increase in impervious surfaces, changes in localized drainage, and possible development within a floodway. However, future development would be required to follow standards and practices aiming to prevent post-wildfire hazards, such as those in Title 18 of the County Code and 2010 General Plan Safety Element, which require existing and new development to be adequately protected from potential flooding or landslides through careful site planning, design, and construction (Section 4.10.1, Regulatory Setting). Cumulative projects involving new development within flood hazard areas would require site design review to determine if any adverse effects to hydrology and flooding would occur, depending on the site-specific location, in accordance with Chapter 16.16 of the County Code (refer to Section 4.10). Cumulative project compliance with flooding and drainage regulations, as well as wildfire protection requirements, on a project-by-project basis would reduce

the potential for flooding and landslides. Therefore, cumulative impacts on post-wildfire flooding or landslides would be less than significant.

### Significance of Impact

Less than significant impact.

### Mitigation Measure

No mitigation measures are required.

### Significance of Impact After Mitigation

Less than significant impact.

#### 4.19.6.5 Cumulative Threshold 5: Risk of Loss, Injury, or Death

Cumulative projects, in combination with future development facilitated by the HEU6, in the WUI, in High or Very High FHSZs, and on steep slopes could result in an increase in the risk of exposure to wildfire. Cumulative projects in the SRA would require review by the Director of the Board of Forestry and Fire Protection, or their designee, to determine if all applicable fire protection measures required for the project and other recommendations by the fire authority have been adequately incorporated in accordance with Section 18.56.040 of the County Code. For example, future residential development in the UMC would be required to include fire protection measures, such as automatic sprinkler systems, fire detection and alarm systems, fire breaks, fire-retardant building materials, fuel modification measures, fire-resistant landscaping, adequate water supply, appropriate signage and building numbering, alternative access routes, and adequate emergency access. Additionally, all new construction projects requiring a grading permit, building permit, or design approval would require submittal of a minor or major landscape package to the Chief of Planning for review and approval to ensure the use of fire-resistant plant spaces as shown on project plans. For the same reasons as the project, cumulative project compliance with state and local fire protection requirements and standards would reduce the risk of loss, injury, or death involving wildland fires. The project includes mitigation measures to reduce potential impacts associated with increased roadway congestion during emergency evacuations (i.e., MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4) and ensure that Objective Process by-right housing developments comply with the same regulations for fire safety that apply to Consistency Process projects (i.e., MM-WF-OBJ-5 and MM-WF-OBJ-6). Therefore, the project's contribution to cumulatively considerable impacts related to fire risk would be less than significant.

### Significance of Impact

Potentially significant impact.

### Mitigation Measure

MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, MM-WF-CONS-4, MM-WF-OBJ-5, and MM-WF-OBJ-6 would apply.

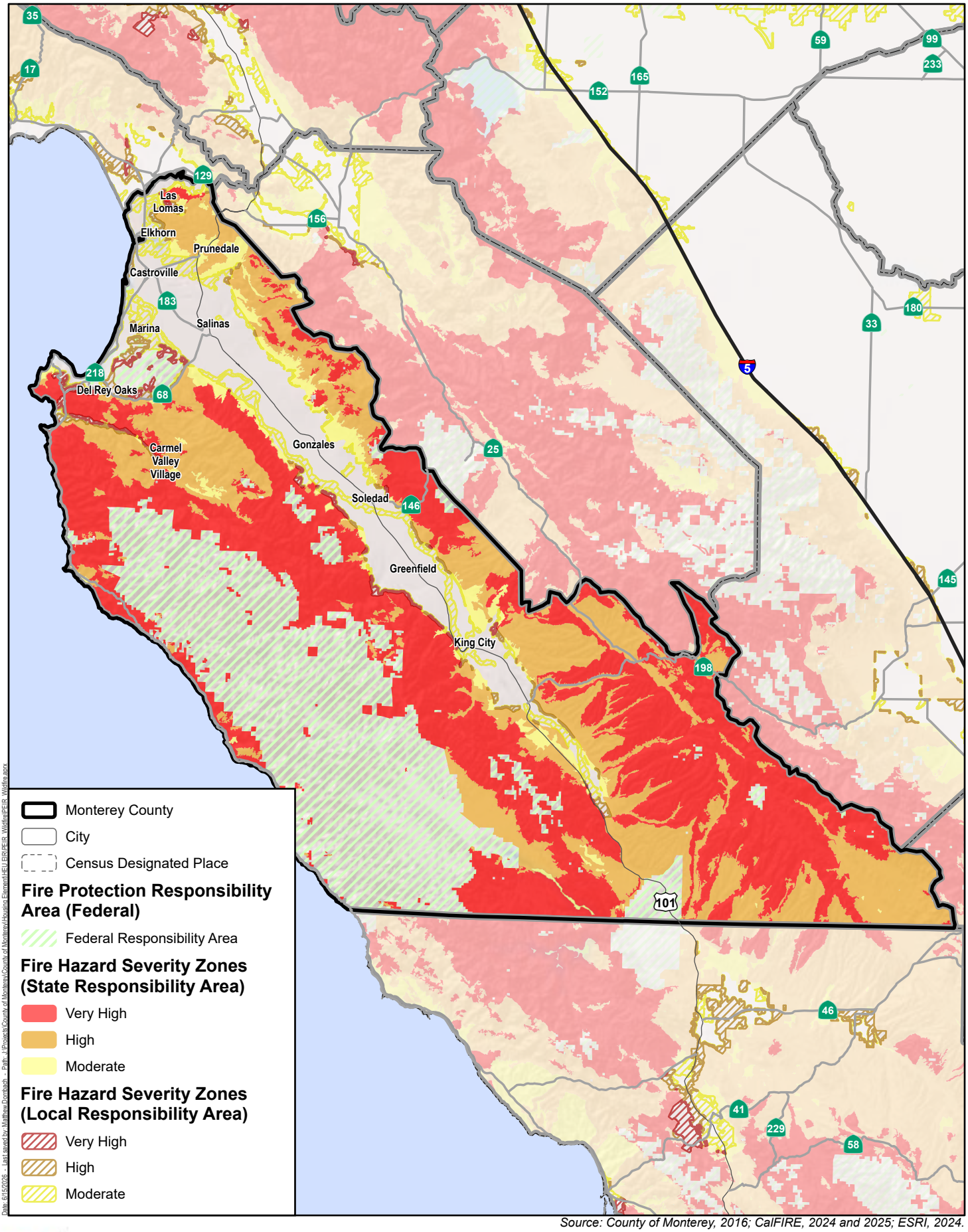
### Significance of Impact After Mitigation

Less than significant impact with mitigation incorporated.

## 4.19.7 Conclusion

Implementation of MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, MM-WF-CONS-4, MM-WF-OBJ-5, and MM-WF-OBJ-6, as well as mitigation measures identified for other issue areas in this PEIR, would reduce potential impacts pertaining to wildfire to a less than significant level.

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2024.*

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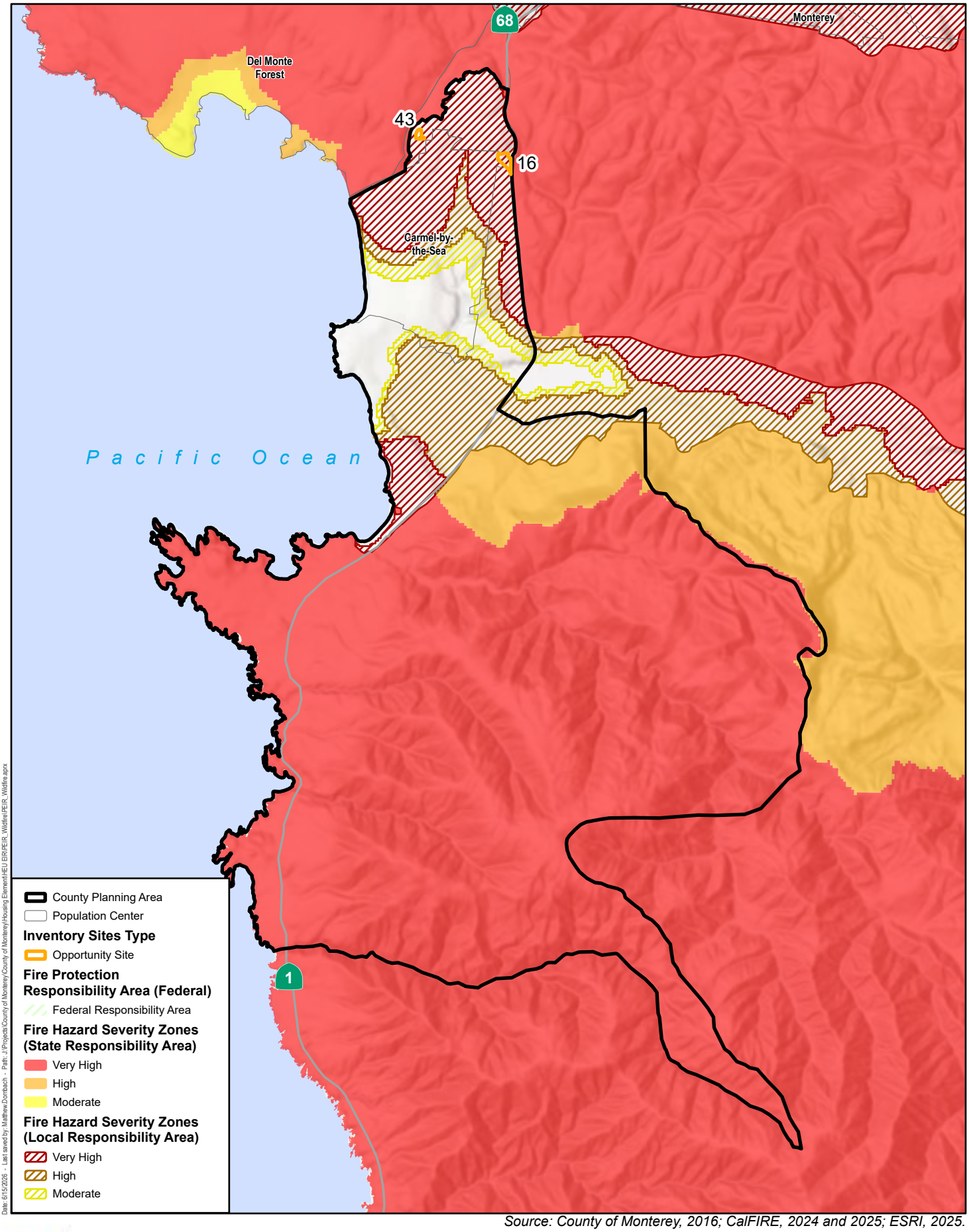
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**Figure 4.19-1**

Monterey County Fire Hazard Severity Zones

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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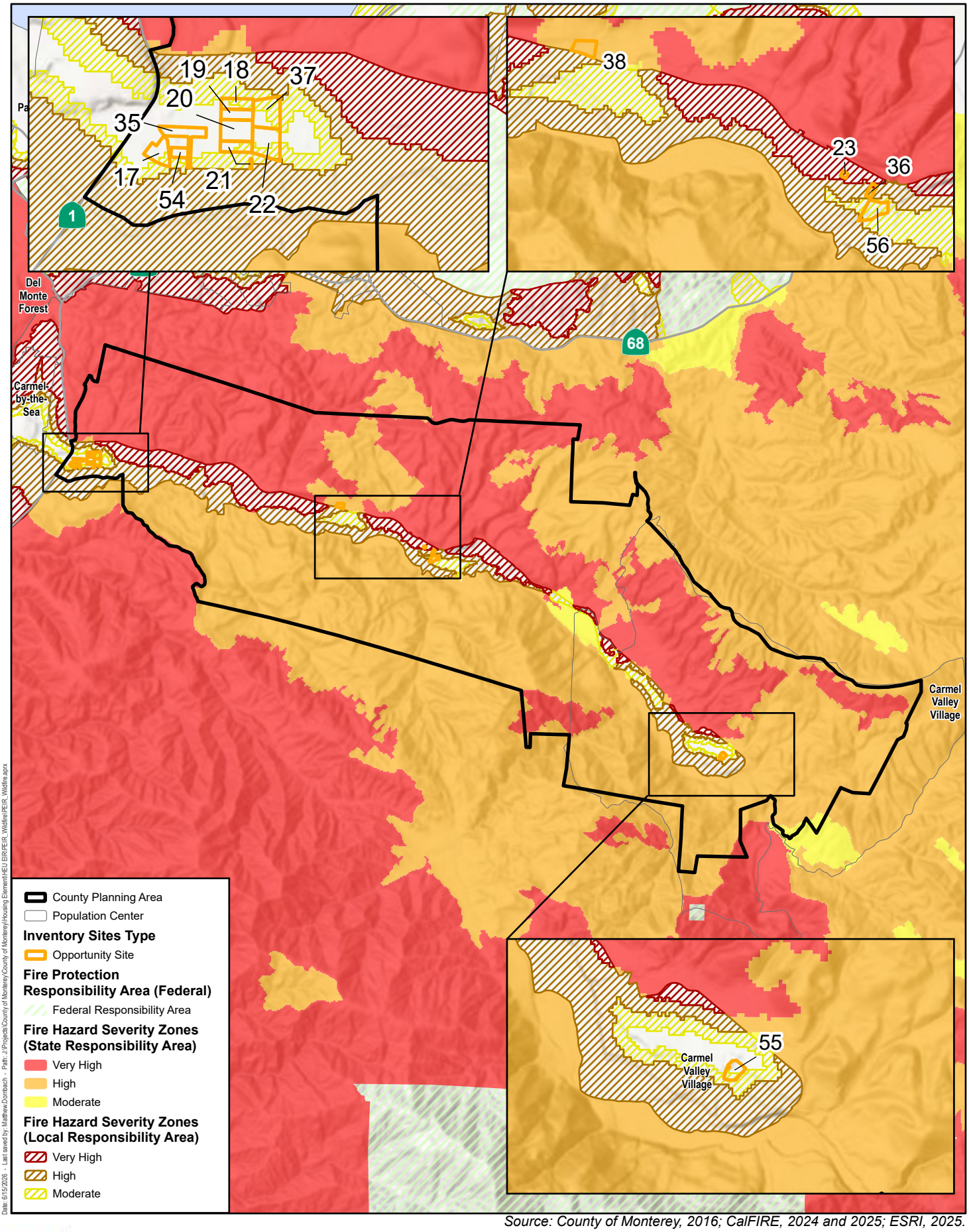
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**Figure 4.19-1a**

Opportunity Sites in Fire Hazard Severity Zones in Carmel Area Land Use Plan

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

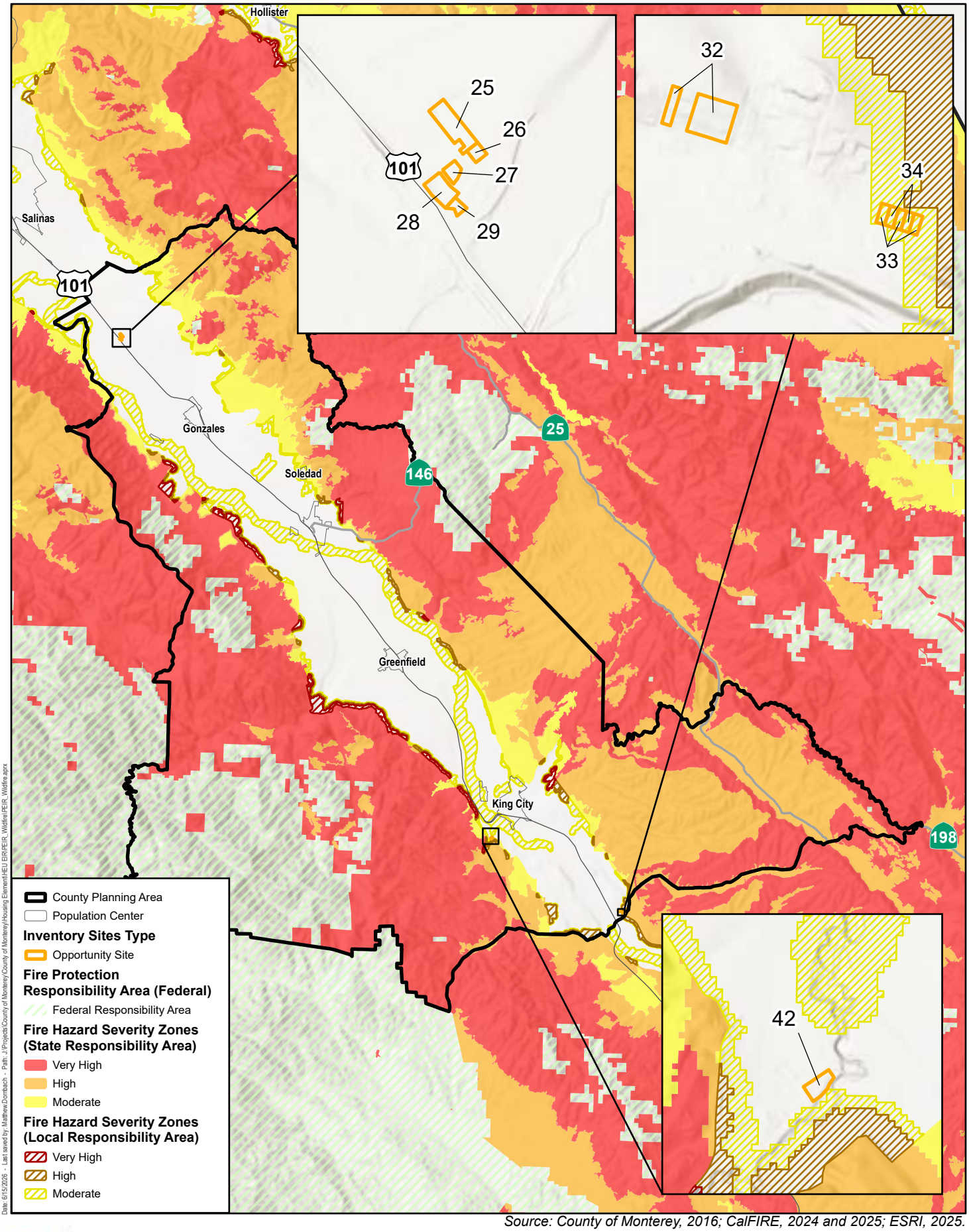
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**Figure 4.19-1b**

Opportunity Sites in Fire Hazard Severity Zones in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

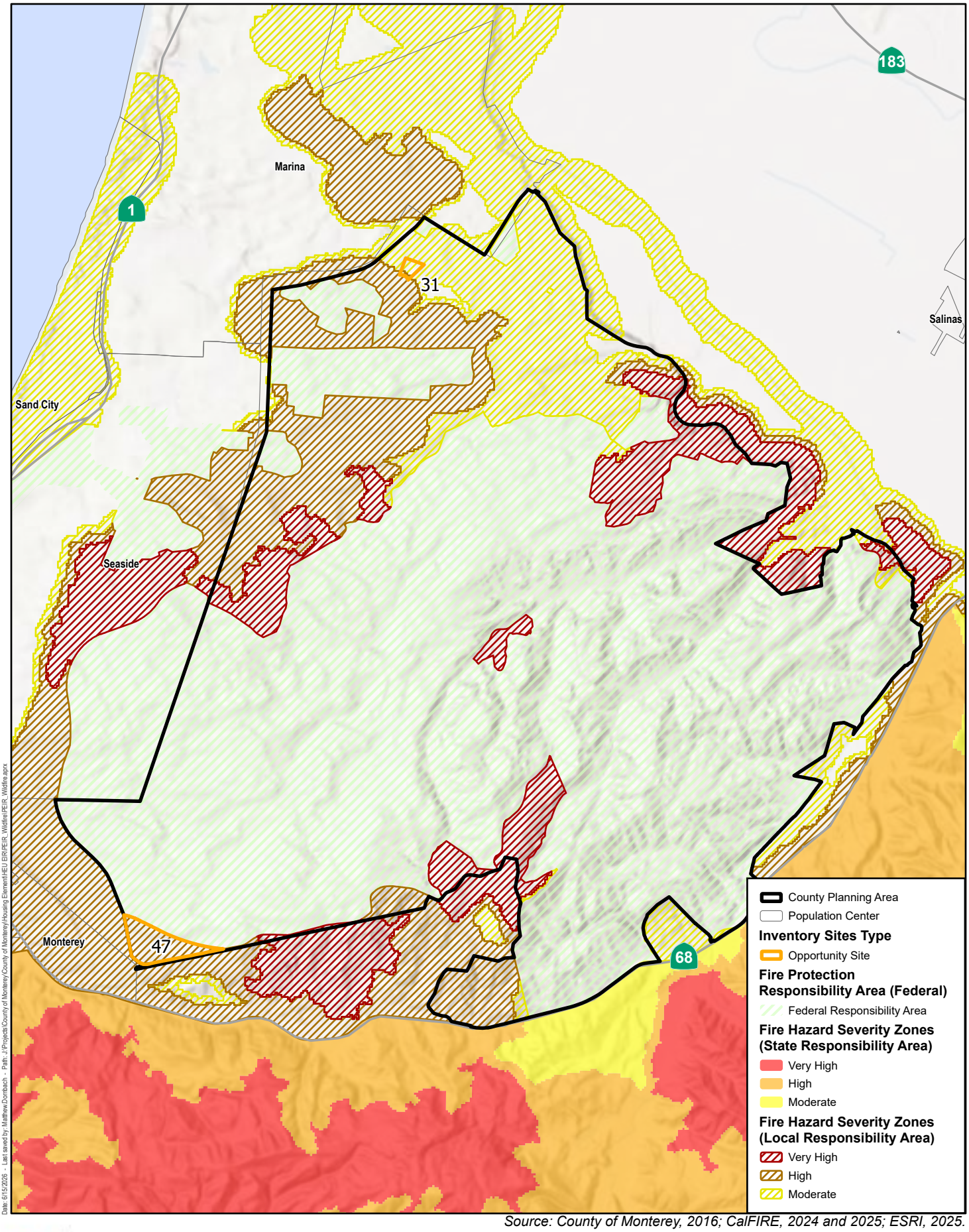
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**Figure 4.19-1c**

Opportunity Sites in Fire Hazard Severity Zones in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

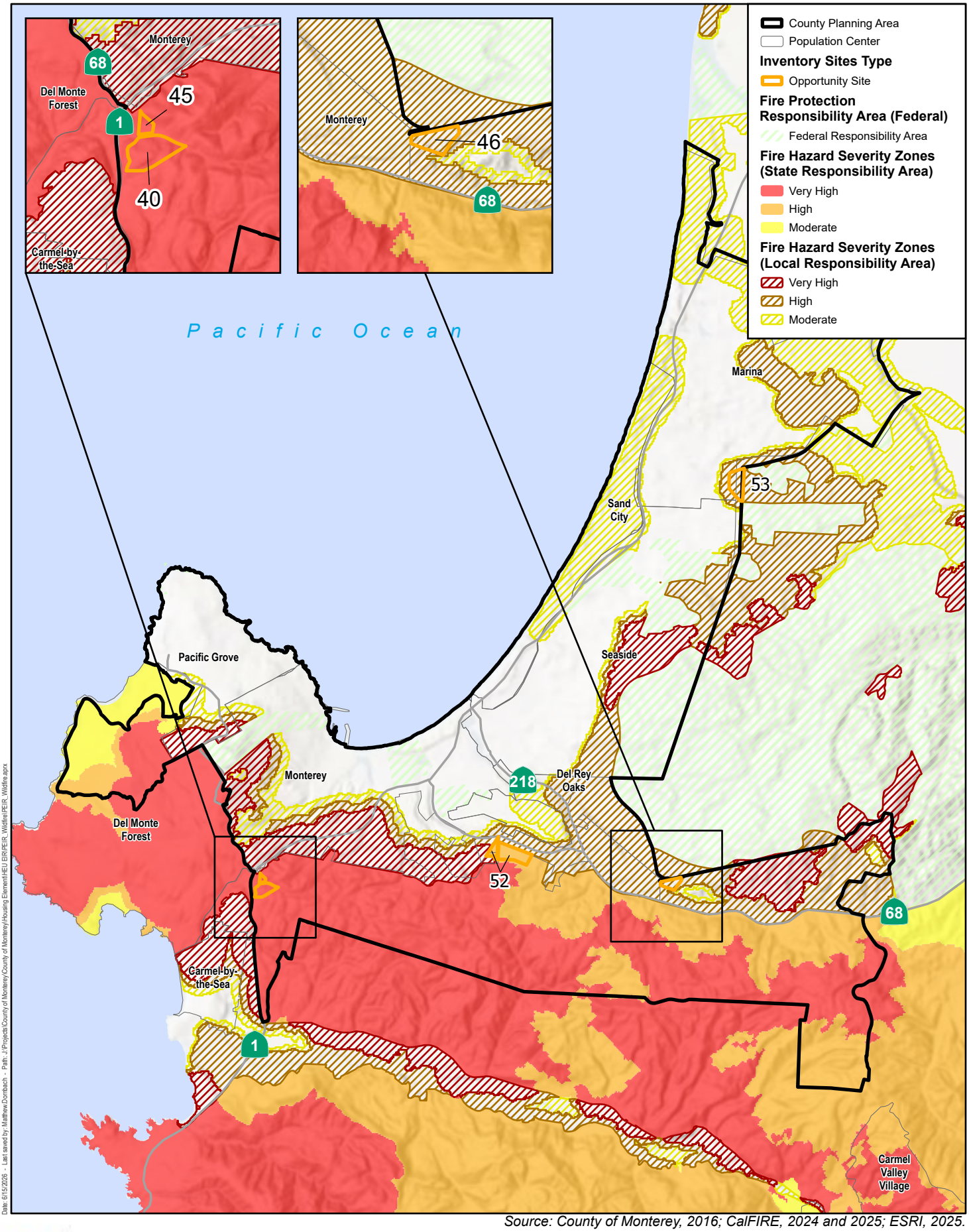
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**Figure 4.19-1d**

Opportunity Sites in Fire Hazard Severity Zones in Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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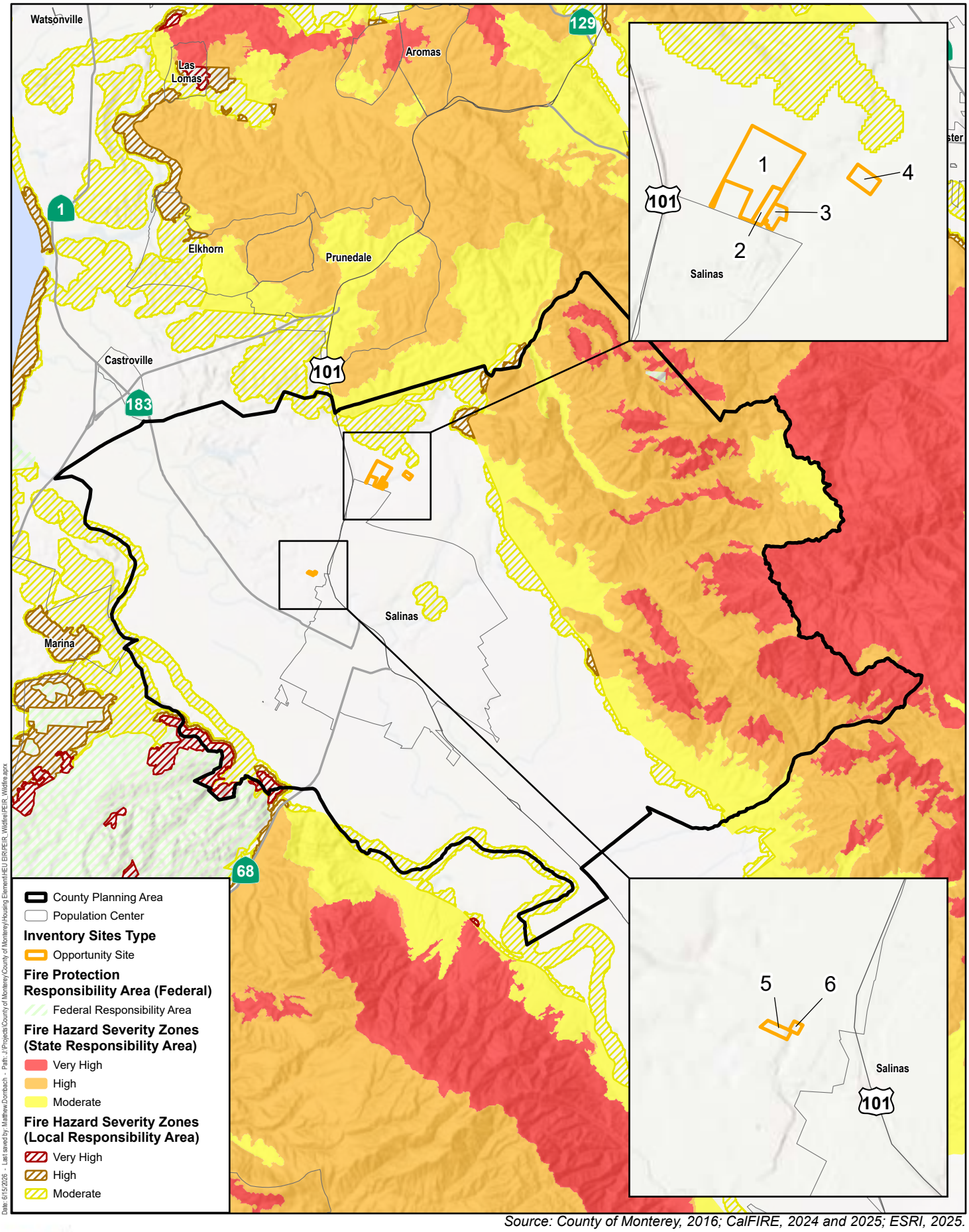
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**Figure 4.19-1e**

Opportunity Sites in Fire Hazard Severity Zones in Greater Monterey Peninsula Area Plan

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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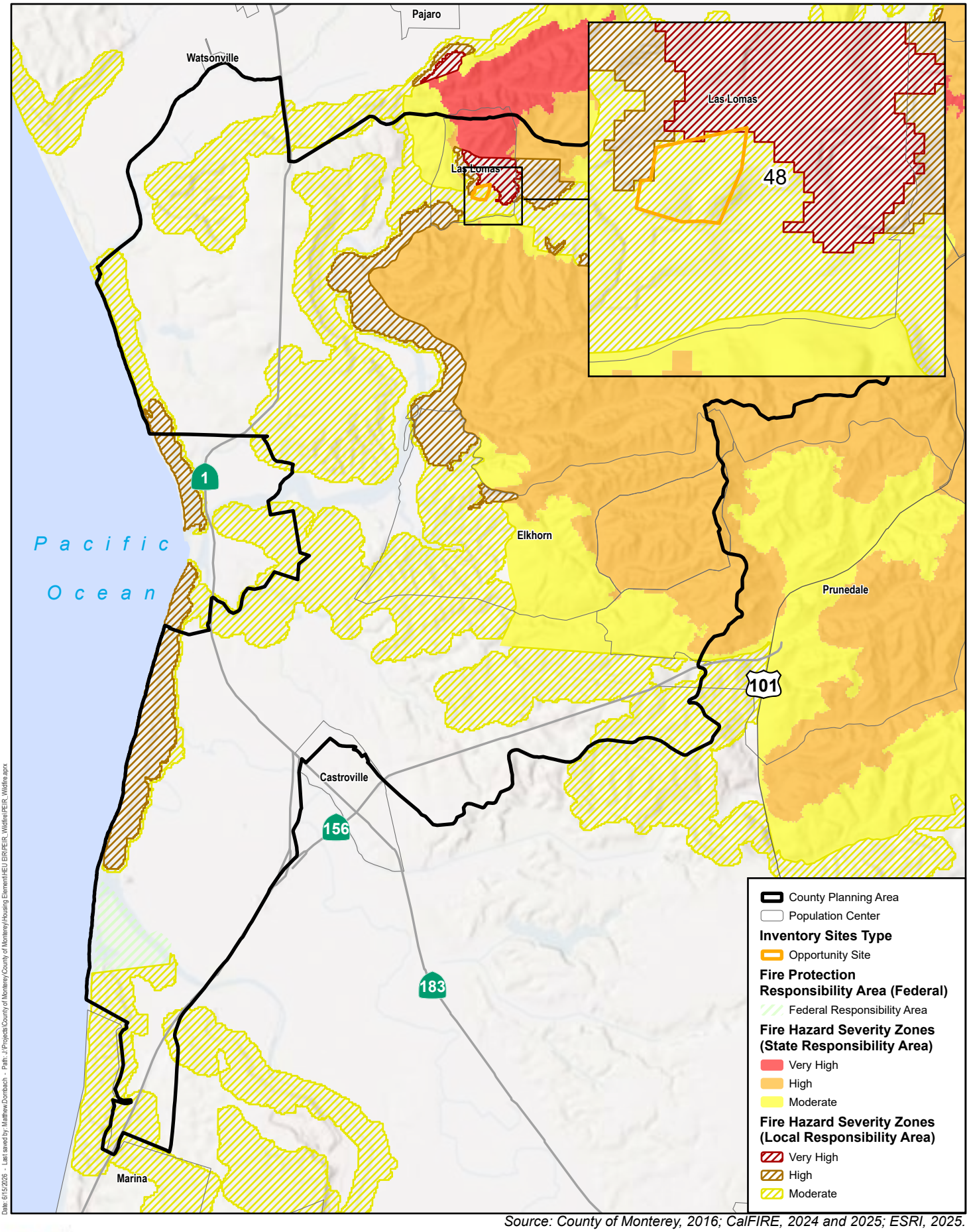
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**Figure 4.19-1f**

Opportunity Sites in Fire Hazard Severity Zones in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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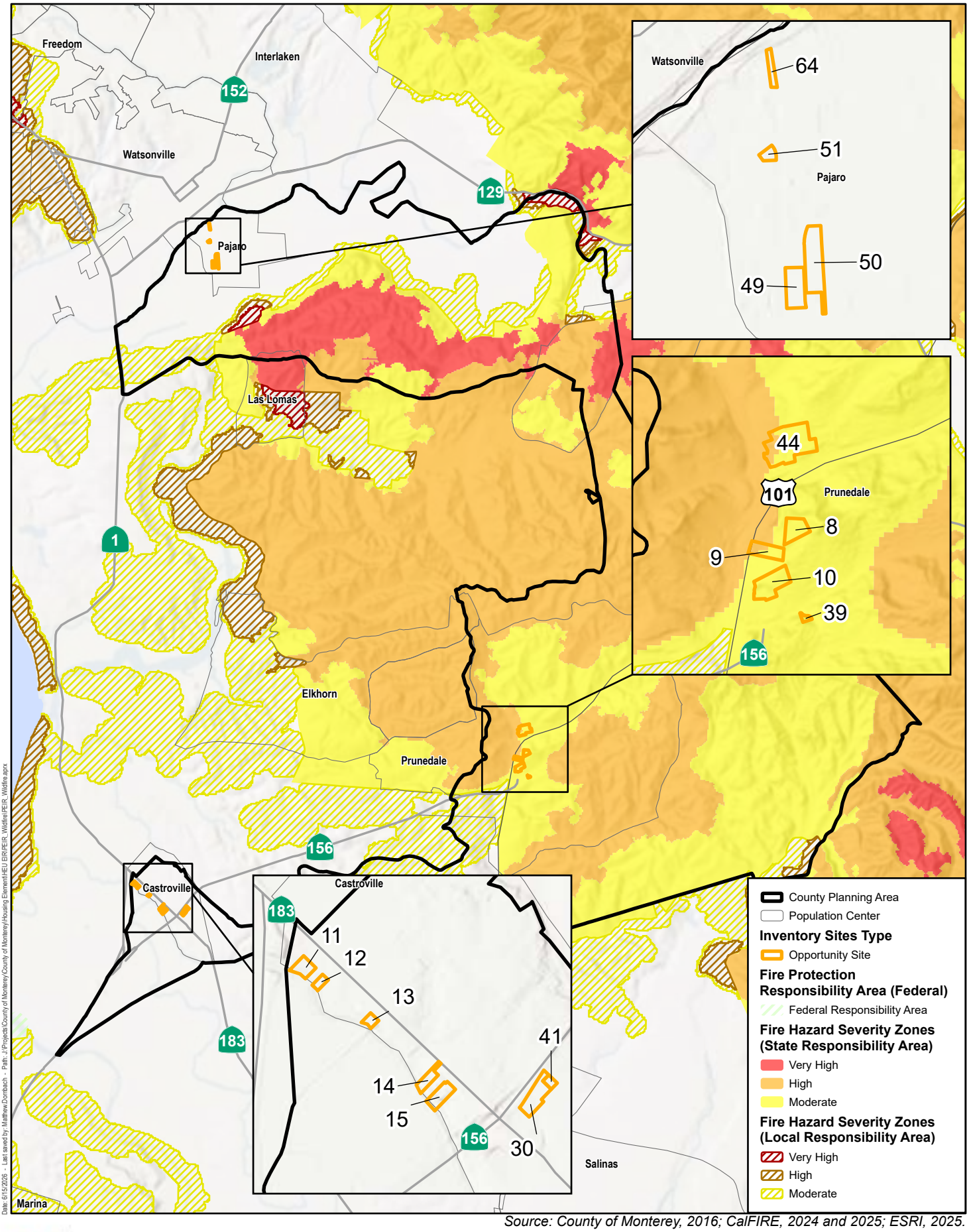
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**Figure 4.19-1g**

Opportunity Sites in Fire Hazard Severity Zones in North County Land Use Plan (Coastal)

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*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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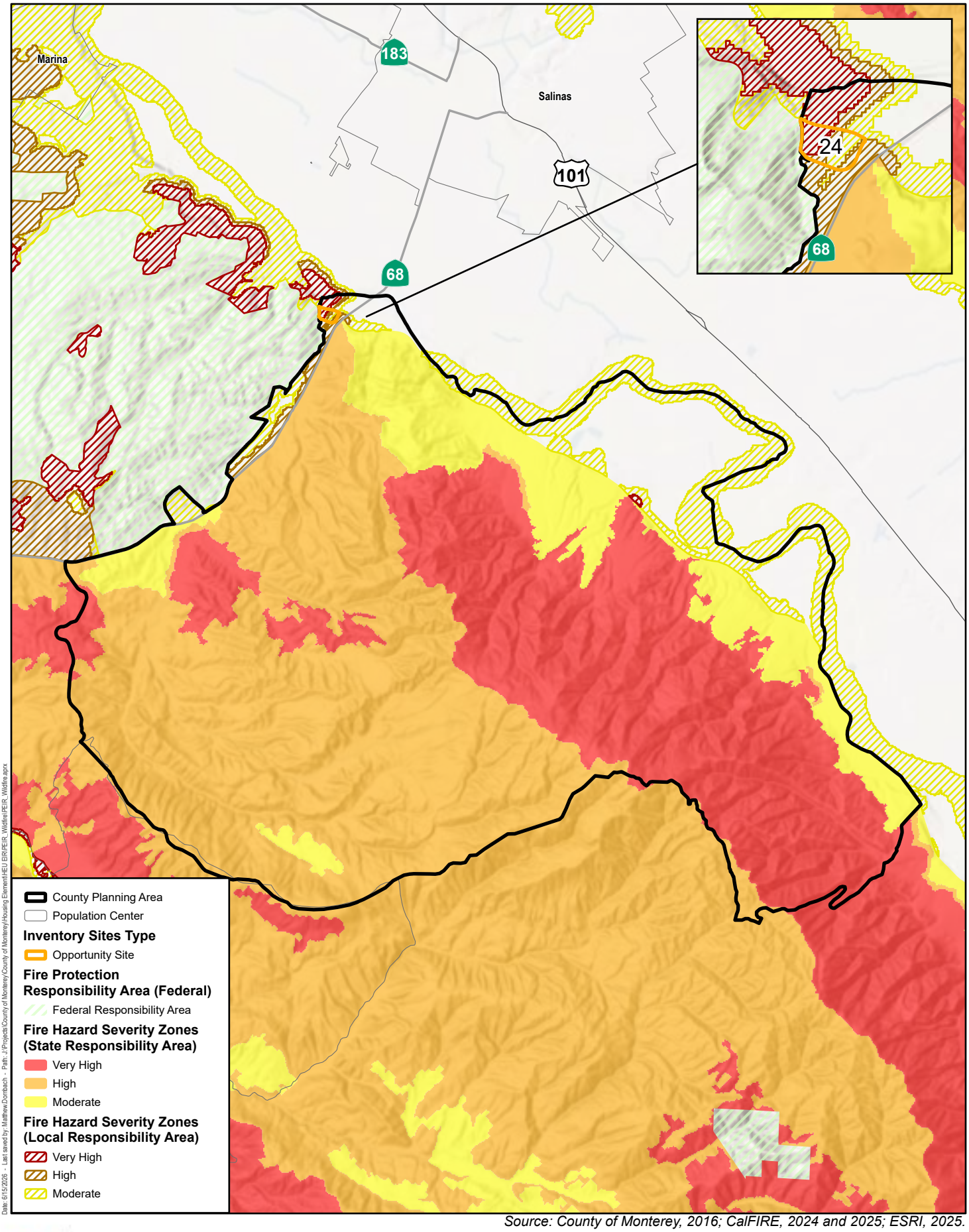
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**Figure 4.19-1h**

Opportunity Sites in Fire Hazard Severity Zones in North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update

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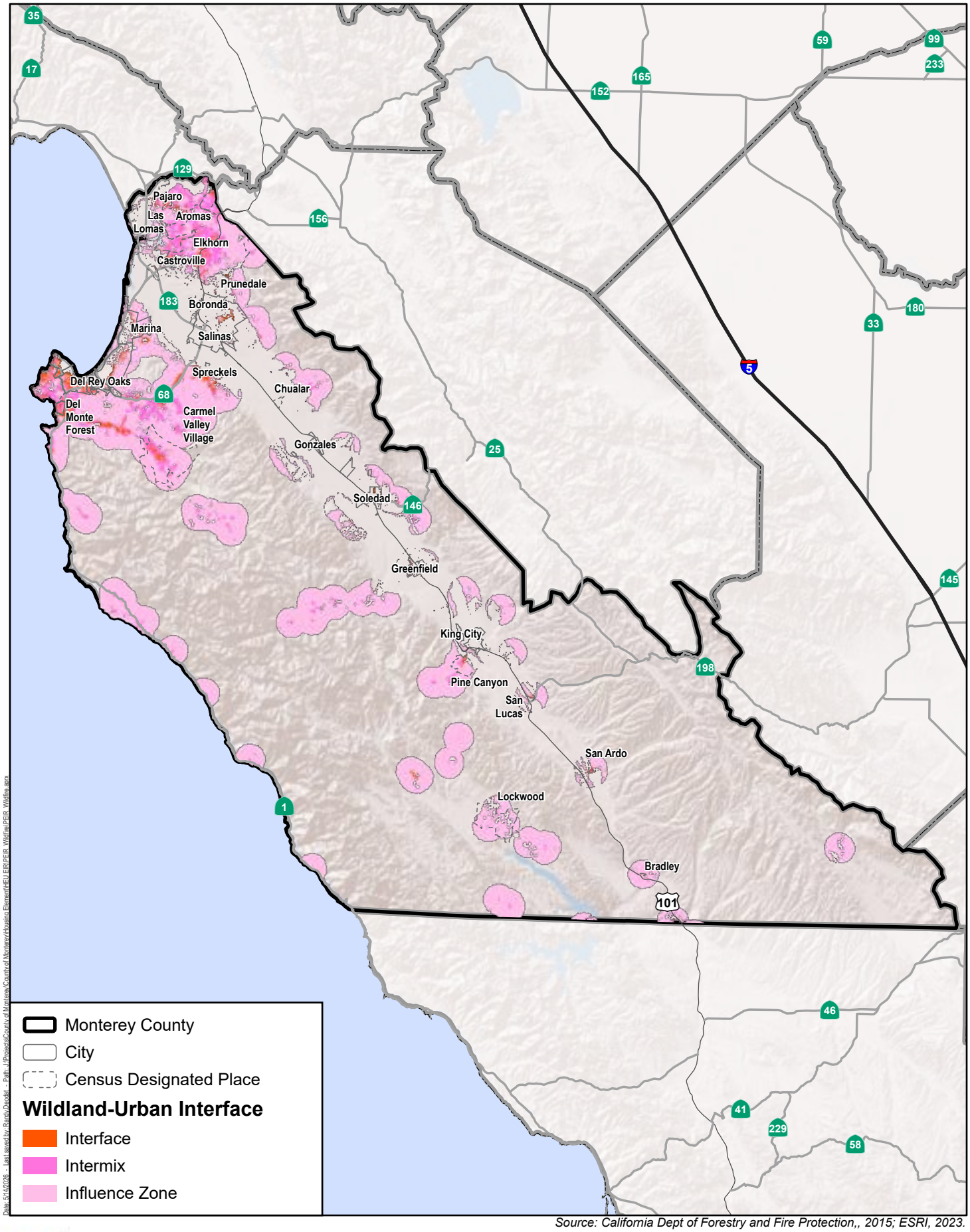

*Source: County of Monterey, 2016; CalFIRE, 2024 and 2025; ESRI, 2025.*

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**Figure 4.19-1i**

Opportunity Sites in Fire Hazard Severity Zones in Toro Area Plan

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*Source: California Dept of Forestry and Fire Protection,, 2015; ESRI, 2023.*

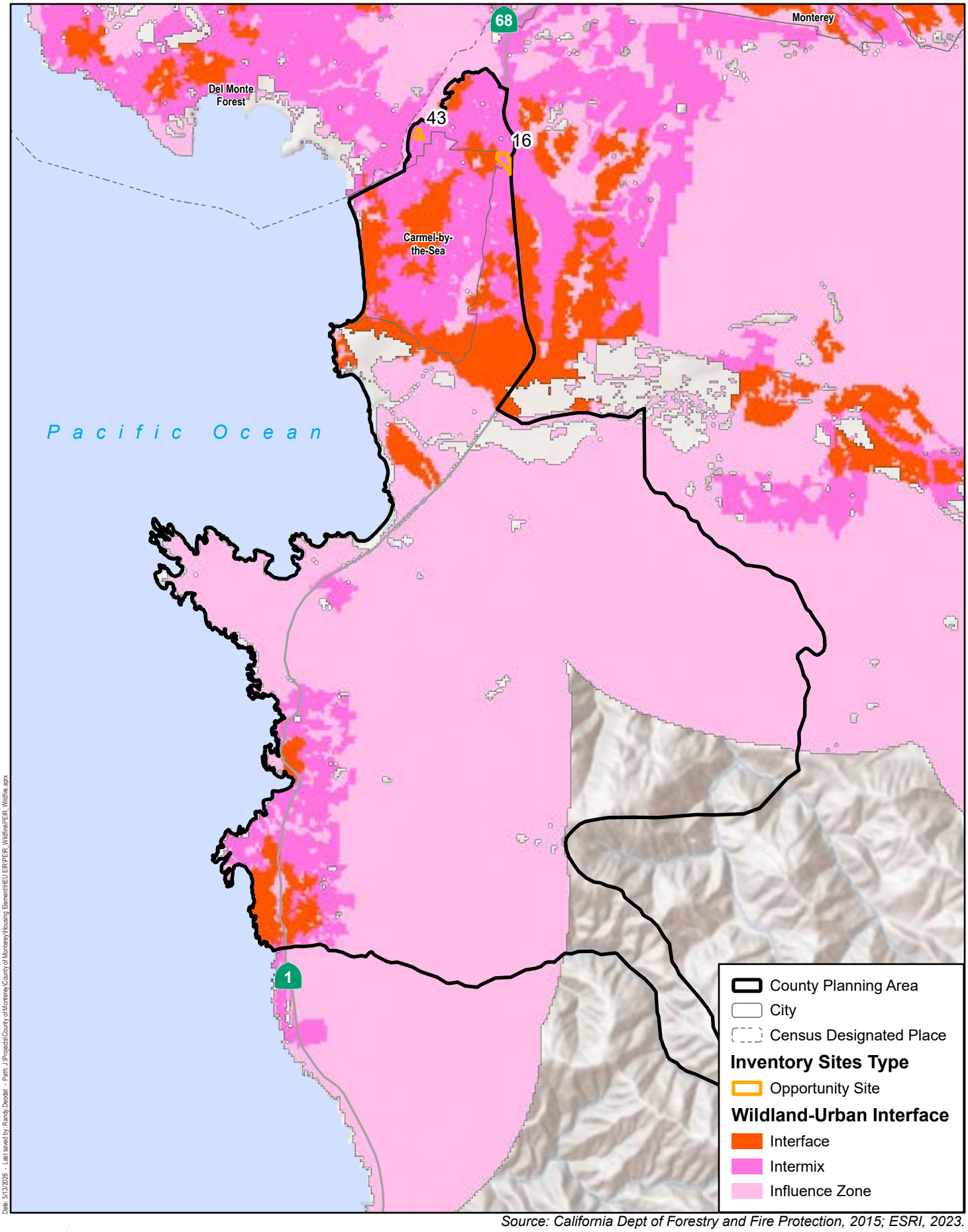
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**Figure 4.19-2**

Monterey County Wildland-Urban Interface

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.

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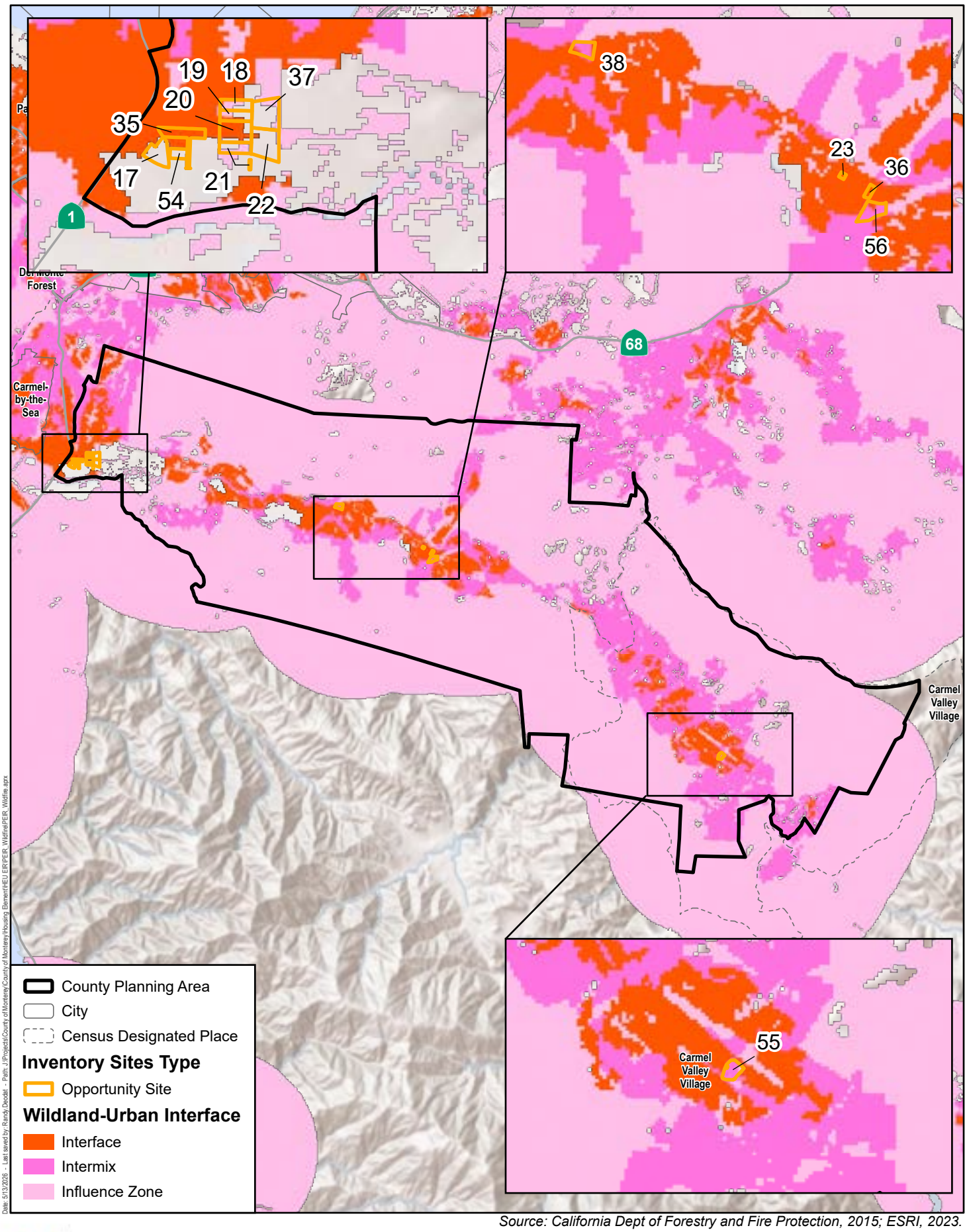
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**Figure 4.19-2a**

Wildland-Urban Interface in Carmel Area Land Use Plan

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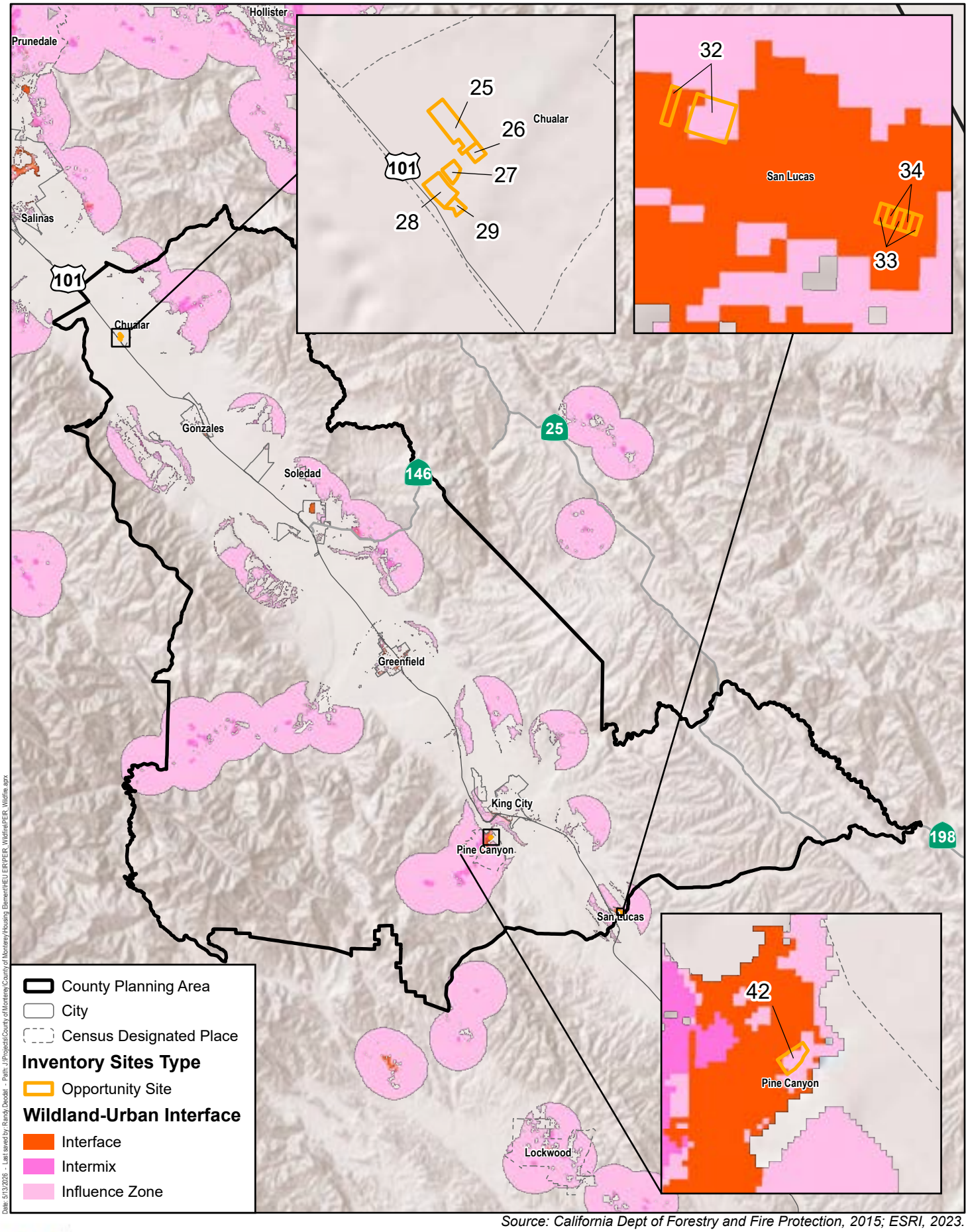

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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**Figure 4.19-2b**

Wildland-Urban Interface in Carmel Valley Master Plan

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*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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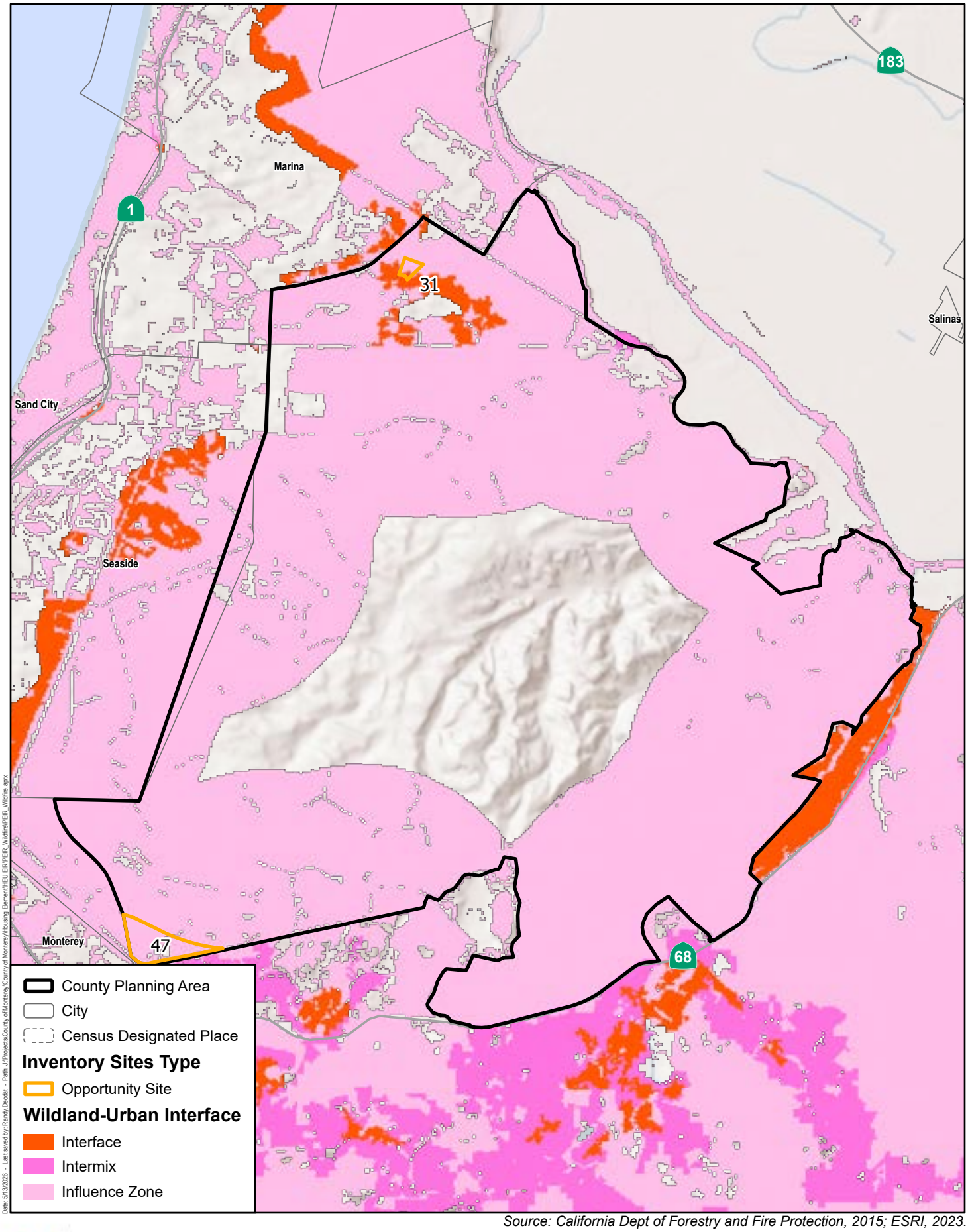
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**Figure 4.19-2c**

Wildland-Urban Interface in Central Salinas Valley Area Plan

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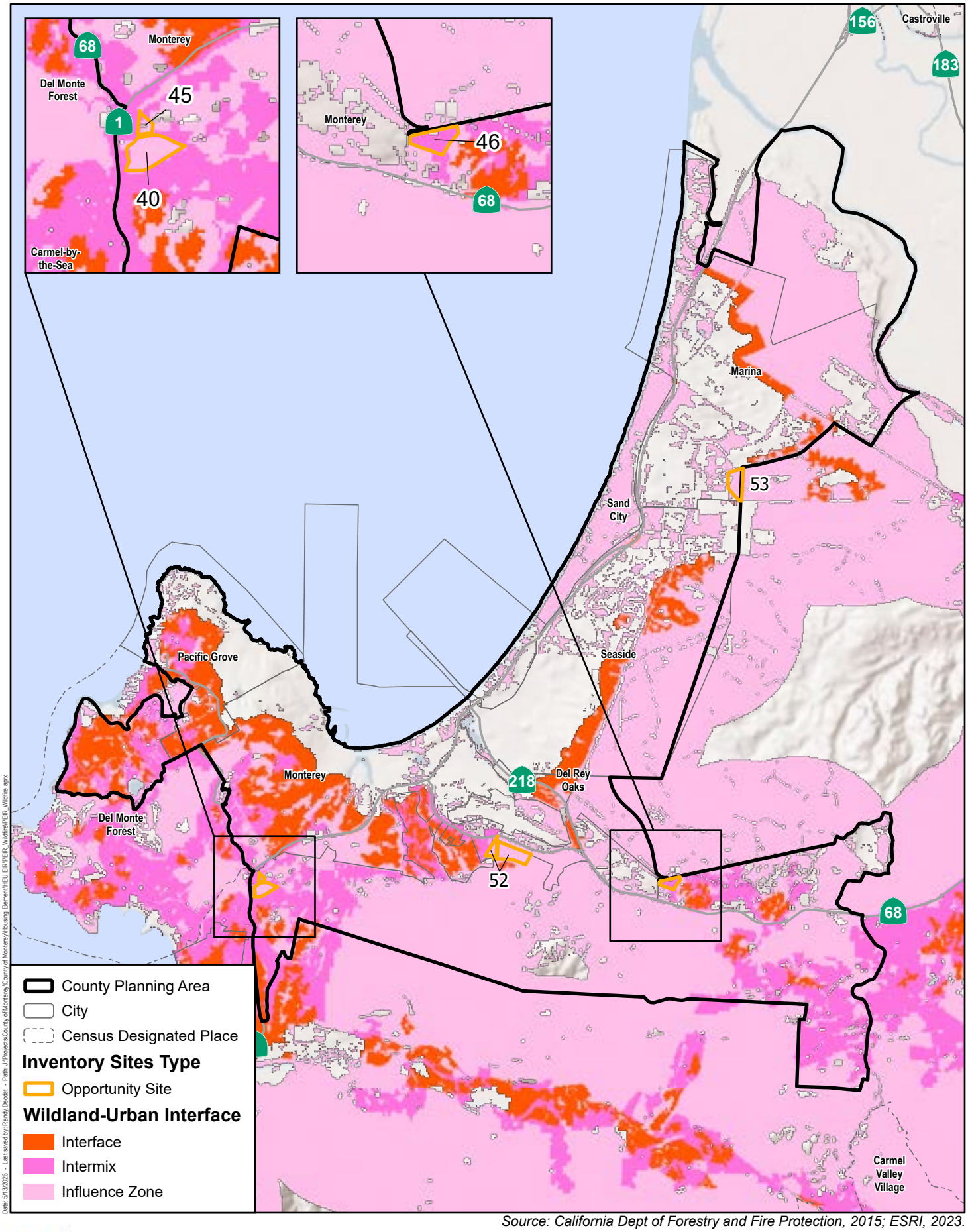

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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**Figure 4.19-2d**

Wildland-Urban Interface in Fort Ord Master Plan

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*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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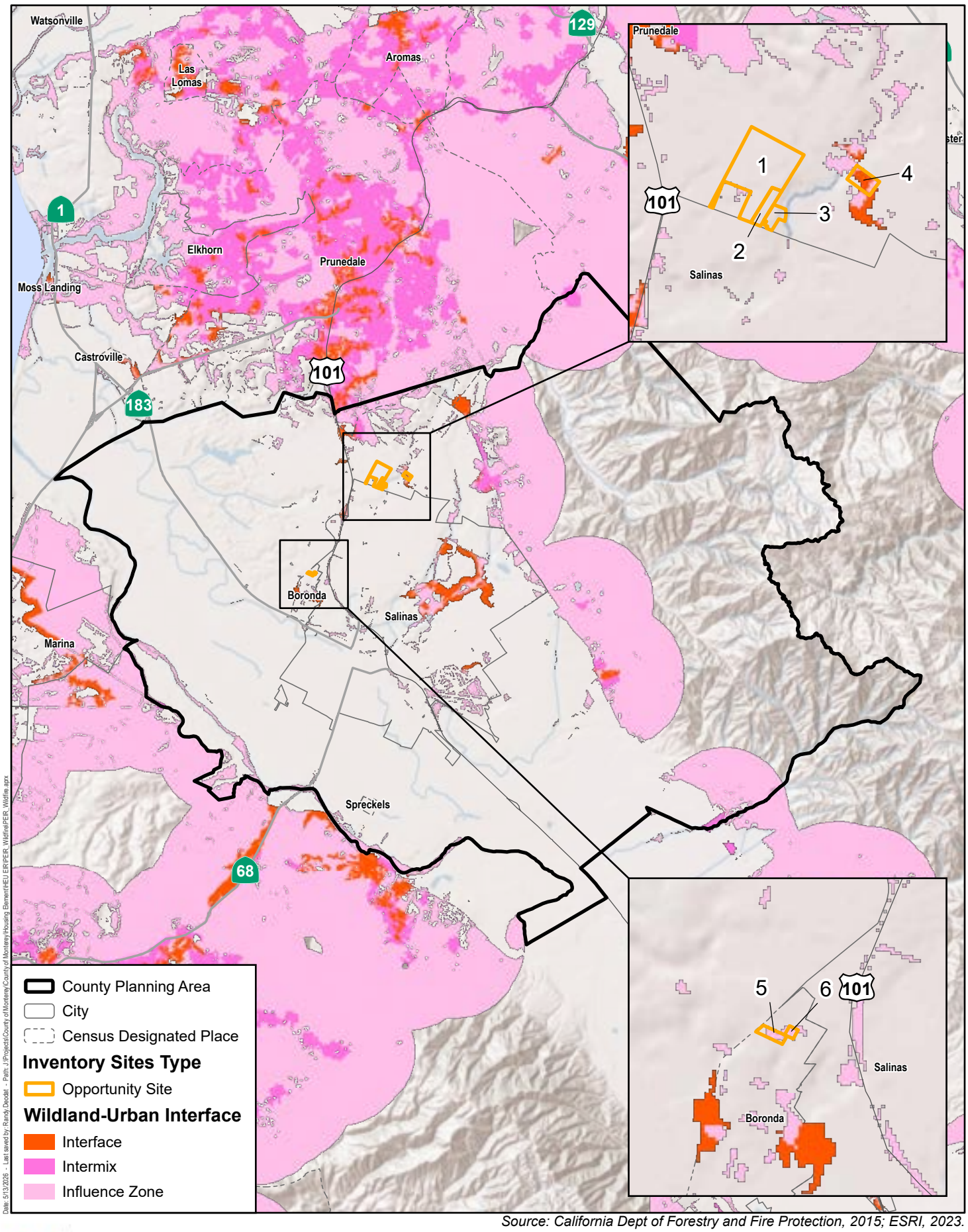
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**Figure 4.19-2e**

Wildland-Urban Interface in Greater Monterey Peninsula Area Plan

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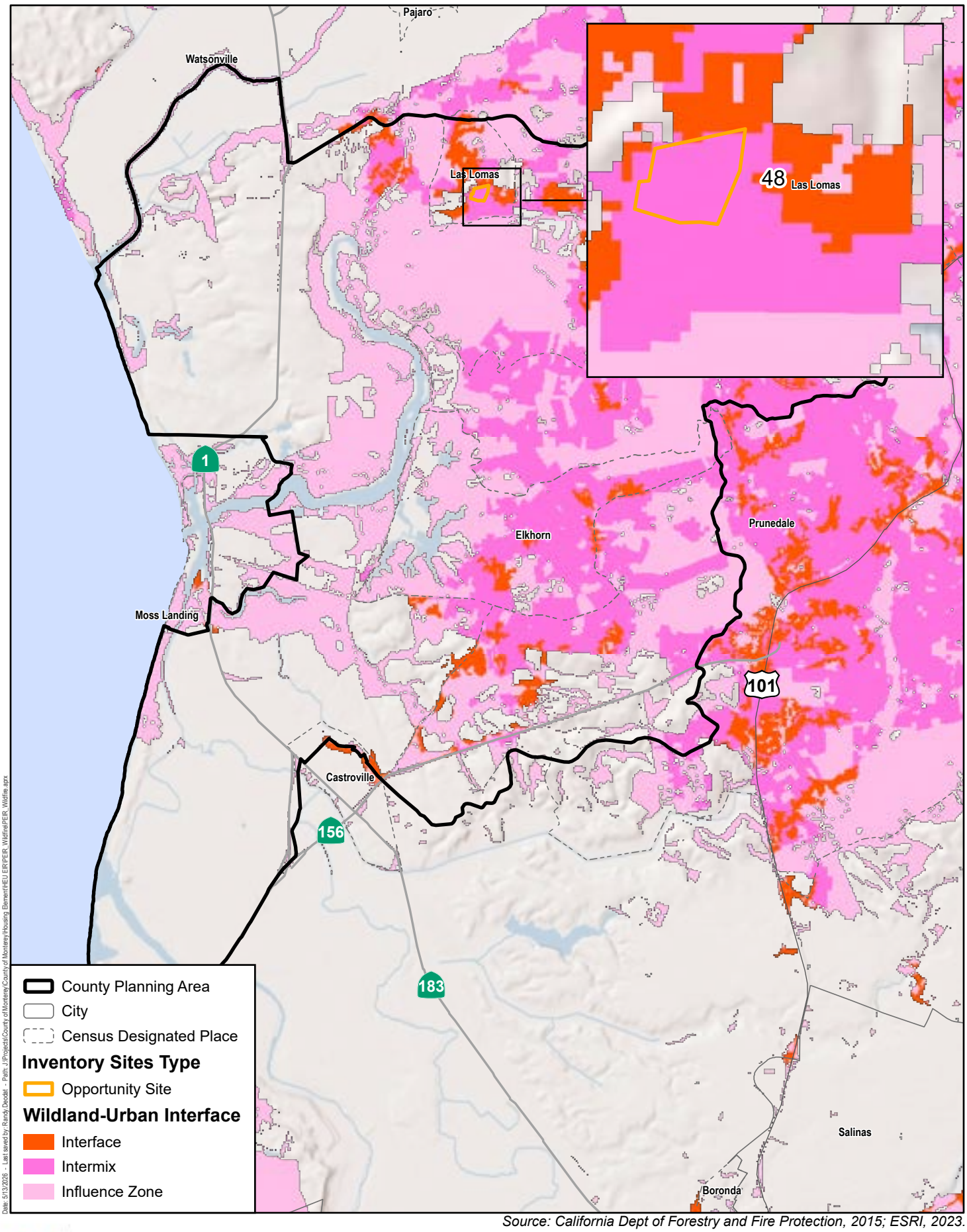

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

Harris & Associates

**Figure 4.19-2f**

Wildland-Urban Interface in Greater Salinas Area Plan

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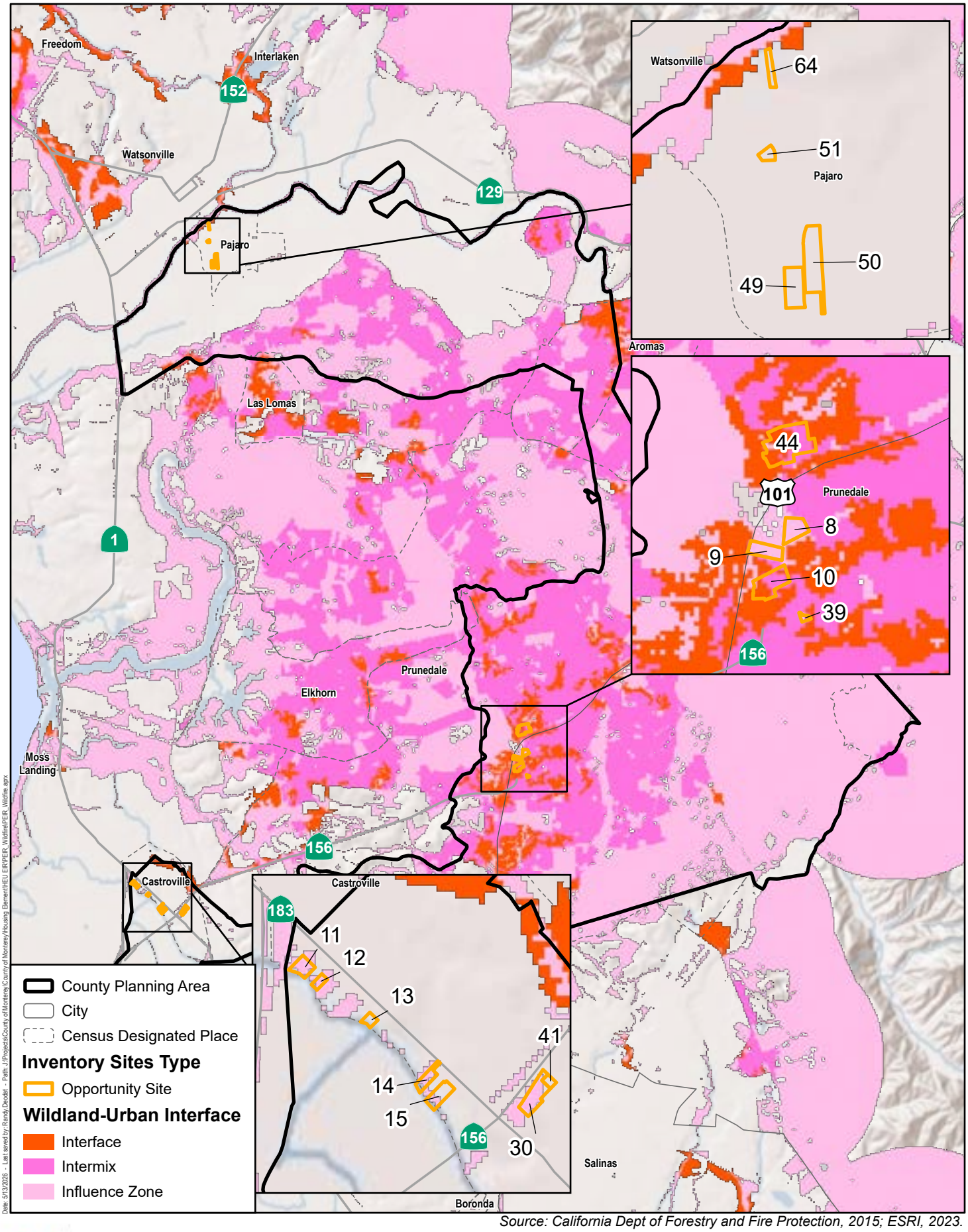

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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**Figure 4.19-2g**

Wildland-Urban Interface in North County Land Use Plan (Coastal)

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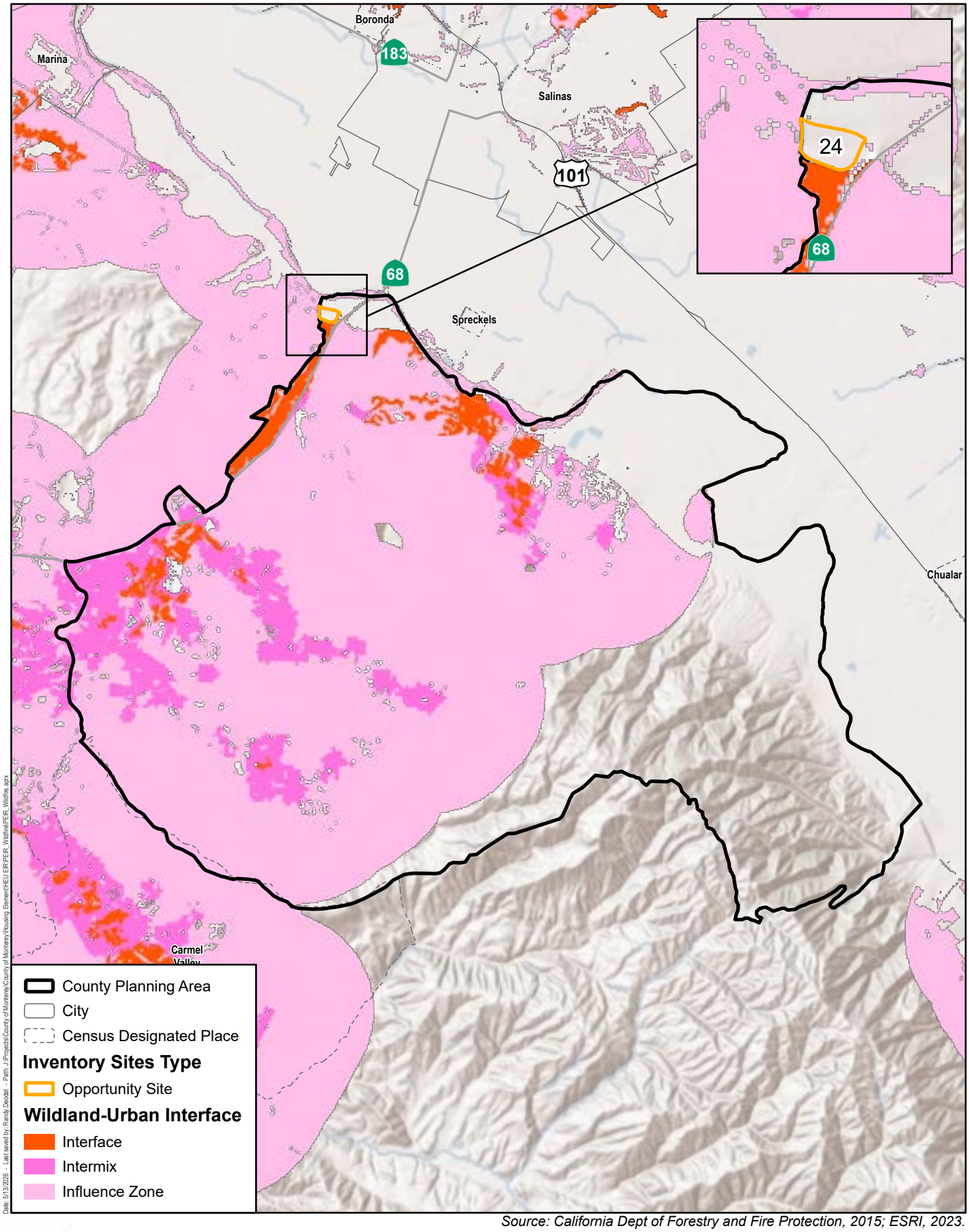

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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**Figure 4.19-2h**

Wildland-Urban Interface in North County Area Plan (Inland)

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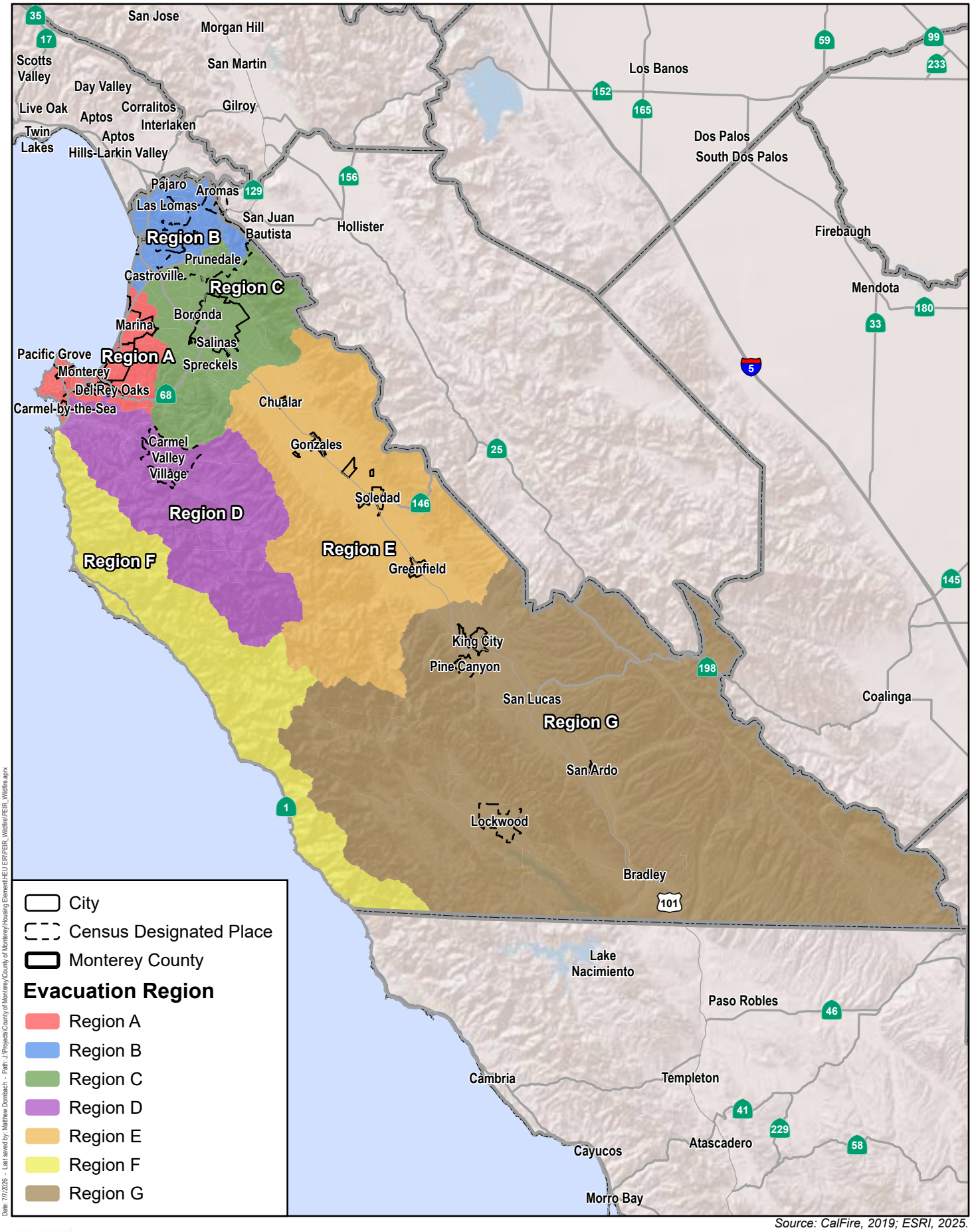

*Source: California Dept of Forestry and Fire Protection, 2015; ESRI, 2023.*

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**Figure 4.19-2i**

Wildland-Urban Interface in Toro Area Plan

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Source: CalFire, 2019; ESRI, 2025.

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**Figure 4.19-3**

Monterey County Operational Area Evacuation Regions

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# Chapter 5 Other CEQA Considerations

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) contain a brief statement disclosing the reasons why various possible significant effects of a project were found not to be significant and, therefore, would not be discussed in detail in the EIR. The County of Monterey, as lead agency, reviewed the proposed County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law, against the environmental issue areas set forth in Appendix G of the CEQA Guidelines.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the Program EIR (PEIR), the following definitions of Monterey County are used to convey its different meanings:

- County of Monterey (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

All environmental issue areas, including those found to have potentially significant impacts, are addressed in Chapter 4, Environmental Analysis, of this PEIR, except Geology and Soils (all threshold topics except paleontological resources or unique geologic features) and Population and Housing. These environmental issue areas were determined to result in less than significant impacts from implementation of the project and, therefore, are addressed separately in Chapter 7, Effects Found Not to Be Significant.

In addition, Section 15126 of the CEQA Guidelines requires that all aspects of a project be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the PEIR must identify the following five components, which are also addressed in this chapter:

- Significant environmental impacts of the project (Section 15126.2[a] of the CEQA Guidelines; addressed in Chapter 4).
- Energy impacts of the project (Section 15126.2[b] of the CEQA Guidelines; addressed in Section 4.6, Energy).

- Significant environmental impacts that could not be avoided if the project is implemented (Section 15126.2[c] of the CEQA Guidelines; addressed in Section 5.1, Significant and Unavoidable Environmental Impacts).
- Significant, irreversible environmental impacts that would result from the project should it be implemented (Section 15126.2[d] of the CEQA Guidelines; addressed in Section 5.2, Significant and Irreversible Environmental Impacts).
- Growth-inducing impacts of the project (Section 15126.2[e] of the CEQA Guidelines; addressed in Section 5.3, Growth-Inducing Impacts).

## 5.1 Significant and Unavoidable Environmental Impacts

Section 15126.2(c) of the CEQA Guidelines requires that an EIR describe any significant impacts that could not be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the project on various aspects of the environment are discussed in detail in Chapter 4 of this PEIR. Based on the analysis presented in this PEIR, the project would create significant and unavoidable impacts related to the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality (groundwater recharge and supply)
- Land Use and Planning
- Transportation (vehicle miles traveled)
- Utilities and Service Systems (water infrastructure and supply)

Refer to the following sections for a complete description of significant and unavoidable impacts to these environmental issue areas:

- Section 4.1, Aesthetics
- Section 4.2, Agriculture and Forestry Resources
- Section 4.3, Air Quality
- Section 4.4, Biological Resources
- Section 4.8, Greenhouse Gas Emissions
- Section 4.10, Hydrology and Water Quality
- Section 4.11, Land Use and Planning
- Section 4.16, Transportation
- Section 4.18, Utilities and Service Systems

All other significant impacts identified in Chapter 4 of this PEIR can be reduced to below a level of significance with either implementation of the mitigation framework identified in Chapter 4 and/or through compliance with applicable federal, state, regional, and local regulations.

Under CEQA Guidelines, Section 15065(c)(4), when an EIR demonstrates that a proposed project will cause significant and unavoidable impacts that cannot be fully mitigated, but the lead agency nevertheless intends to adopt the proposed project, it must first adopt a Statement of Overriding Considerations (SOC). Under CEQA Guidelines, Section 15093, an SOC is a policy statement that the decision-making agency must adopt whenever it intends to approve a proposed project that would cause significant, unmitigable impacts. In the SOC, the decision-making agency must affirmatively (1) identify the project's policy benefits, including its specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits; (2) make a finding that these benefits outweigh the project's unavoidable, adverse environmental effects; and (3) support this finding with written "specific reasons to support its action based on the final EIR and/or other information in the record. The [SOC] shall be supported by substantial evidence in the record" (CEQA Guidelines, Section 15093).

Here, if it intends to approve the project, the County would be required to adopt a SOC to address the significant impacts identified above and discussed in detail in Chapter 4. The County may weigh the long-term benefits of the project, such as enhancing the affordability, diversity, quantity, and quality of the housing supply, promoting, encouraging, and facilitating housing for special needs groups, preserving the affordable housing stock, and helping to overall address the local housing crisis, against the identified significant, unavoidable impacts.

To facilitate consideration of these issues, this PEIR discloses potential impacts and provides a range of alternatives to the project that could more fully alleviate environmental concerns. In addition, Section 4.11, Land Use and Planning, provides an overview of the County's policy context, including information on how the project would meet several important County policy objectives and describes how the project may implicate concerns as to its potential consistency with other County policies. The County should review all this information when considering the project.

### 5.1.1 Reasons the Project is Being Proposed Notwithstanding Its Significant and Unavoidable Impacts

In addition to identifying a project's significant unavoidable impacts, CEQA Guidelines, Section 15162.2(c), requires decision-making agencies to specify which such impacts, if any, "cannot be alleviated without imposing an alternative design," and to describe both the "implications" of these impacts and the "reasons why the project is being proposed, notwithstanding their effect. . . ." As described in Chapter 1, Introduction, and Chapter 3, the Housing Element is one of seven state-mandated General Plan Elements. Among other requirements, the Housing Element must identify, analyze, and make adequate provision for the existing and projected housing needs of

all economic segments of the community. California Government Code, Sections 65580–65589.8, require that communities prepare and update the Housing Element every 8 years. The County's Housing Element for the UMC was updated in 2016 for the Fifth Cycle (2015–2023). With the Fifth Cycle Housing Element Update concluded, the County must now plan for the Sixth Cycle Housing Element Update for the 2023–2031 planning period. The HEU6 would serve as the County's Housing Plan for the 2023–2031 planning period, setting clear goals, policies, and programs to meet state requirements by providing for the housing needs of all segments of the population while affirmatively furthering fair housing and preventing the displacement of existing residents. As required by state law, the HEU6 must be adopted locally and certified by the California Department of Housing and Community Development. If the California Department of Housing and Community Development determines that a Housing Element fails to substantially comply with the state housing law, there are potentially serious consequences, including limited access to state funding, as well as the potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its General Plan is at risk of being deemed inadequate and therefore invalid. If a jurisdiction is sued over an inadequate General Plan, the court may impose requirements for land use decisions until the jurisdiction brings its General Plan, including its Housing Element, into compliance with state housing law. Additionally, because the project was not approved and certified by its state-mandated deadline of December 15, 2023, the County is subject to provisions of the Housing Accountability Act known as the "Builder's Remedy."[1] The Builder's Remedy significantly limits the County's ability to deny housing developments in the UMC. These provisions of the Housing Accountability Act apply Monterey Countywide until the Housing Element is found to be in compliance with state law. Builder's Remedy projects can lead to unplanned and scattered residential and mixed-use growth that is inconsistent with the County's adopted Monterey County General Plan (2010 General Plan) policies and zoning regulations (refer to Section 6.2.1, Alternative 1: No Project Alternative).

## 5.2 Significant and Irreversible Environmental Impacts

Section 15126.2(d) of the CEQA Guidelines requires a discussion of any significant, irreversible environmental changes that would be caused by the project should it be implemented. Generally, a project would result in significant, irreversible environmental impacts if the following occurred:

[1] The "Builder's Remedy" refers to a provision under the Housing Accountability Act that prevents local jurisdictions without a state-certified Housing Element from denying certain housing projects that meet specific affordability criteria, even if the project does not comply with the local General Plan or zoning. Generally, there is no limit on the maximum size of a Builder's Remedy project in state law, although the minimum size is two dwelling units and recently enacted legislation imposes some density limits. When processing Builder's Remedy applications, the County is still required to adhere to the California Coastal Act, implemented through the County's Local Coastal Program, and CEQA (Section 65589.5[e]). However, it is possible that a Builder's Remedy project may be combined with ministerial streamlining, such as Senate Bill 2011 or Senate Bill 35 to process ministerially.

- The project would involve a large commitment of nonrenewable resources (i.e., biological habitat, agricultural land, mineral deposits, water bodies, energy resources, and cultural resources).
- The primary and secondary impacts would generally commit future generations to similar uses (e.g., a highway improvement that provides access to a previously inaccessible area).
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Compliance with all state and local regulations, development standards, and applicable building codes would ensure that natural resources are conserved to the maximum extent feasible. The potential for the project to result in the irreversible consumption of natural resources and irreversible environmental damage is described in Section 5.2.1, Irreversible Consumption of Resources, and Section 5.2.2, Irreversible Environmental Damage. Overall, while the project may result in significant, irreversible consumption of natural resources, it does not unreasonably consume non-renewable resources or involve substantial environmental hazards.

### 5.2.1 Irreversible Consumption of Resources

Implementation of the project would require the irreversible consumption of natural and working lands, natural resources, and energy. Natural resources consumption could include sand and gravel, lumber and other forest products, asphalt, steel, copper, other metals, and water. Infrastructure materials, while perhaps recyclable in part at some long-term future date, for practical purposes, would be permanently consumed. The commitment of natural resources and energy required for the construction and operation of the project would be irreversible and would limit the availability of such resources for future generations or for other uses during the life of the project.

#### 5.2.1.1 Agricultural and Forest Land

The conversion of agricultural or forestry lands to non-agricultural or non-forest uses generally constitutes an irreversible commitment of land resources. For instance, converting land mapped as Important Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the California Department of Conservation's Farmland Mapping and Monitoring Program) or forest land to urban uses commits future generations to these altered land uses. Once high-value agricultural soil is paved over or graded for development, its ability to support farming is permanently compromised. Additionally, converting timberland or forest land to non-forest uses results in the irretrievable loss of commercial timber and vital biological carbon sinks. As described in Section 4.2. Further, extending infrastructure (e.g., roads, water, and power lines) to

support residential development into previously undeveloped, rural agricultural areas may encourage additional development, compounding the irreversible loss of adjacent farmlands.

#### 5.2.1.2 Cultural and Tribal Cultural Resources

Both cultural and Tribal Cultural Resources are often non-renewable and irreplaceable. For example, if these resources are destroyed by a development project without adequate Tribal consultation and avoidance, preservation, or data recovery measures, they could be lost forever. The physical demolition, destruction, or substantial alteration of cultural resources (including historical buildings, archaeological sites, and human remains) can permanently erase the data and historical context they hold. However, mitigation measures identified in this PEIR include requirements for Phase I and Phase II historical resources assessments; historical resources protection measures; Phase I, Phase II, and Phase III archaeological resources assessment reports; and avoidance, preservation, and data recovery measures. With implementation of Mitigation Measures (MM-) CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, MM-CUL-CONS-4, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8, impacts on cultural and Tribal Cultural Resources would be reduced to a less than significant level. Nevertheless, the original context and integrity of a resource may be irreparably altered by future residential development facilitated by the project.

#### 5.2.1.3 Energy

Energy derived from non-renewable sources, such as fossil fuels, would be consumed during construction and as a result of operational lighting, heating, cooling, and equipment and transportation uses. Electricity would be consumed for power tools, electric equipment, and lighting. Additionally, non-renewable fuels would be used by construction equipment, haul trucks, and worker vehicles. This commitment of energy resources would be irreversible and would limit the availability of such resources for other uses. However, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of resources, as further described in Section 4.6, Energy. In addition, consumption of such resources is associated with any development in the region and is not unique or unusual to the project. Further, new technologies or systems may emerge in the future, or become more cost-effective or user-friendly, to further reduce the reliance on non-renewable natural resources, such as solar photovoltaic energy and other renewable energy sources.

#### 5.2.1.4 Groundwater Resources

As described in Section 4.10, groundwater is of critical importance to Monterey County as it is the primary source of water supply to meet potable water demand. Development facilitated by the project may result in significant, irreversible impacts to groundwater supplies due to both an increase in demand and interference with groundwater recharge from the increase in impervious surfaces that could reduce stormwater infiltration into groundwater basins. Further, the project

may result in significant, irreversible groundwater impacts associated with permanently lowering the water table in a way that irreversibly impairs local ecosystems or potable water supplies, inducing irreversible subsidence due to excessive pumping that can permanently destroy aquifer storage capacity, and triggering irreversible saltwater intrusion in coastal or basin aquifers that can contaminate the freshwater quality for future generations. Although construction and operation of residential development projects would incorporate water conservation measures and site design with runoff retention and infiltration basins to encourage groundwater recharge, impacts on groundwater recharge and supplies in critically over-drafted or high-priority groundwater basins would be significant and unavoidable (refer to Section 4.10 and Section 4.18).

#### 5.2.1.5 Mineral Resources

Buildout of the opportunity sites included in the HEU6 would occur in areas mapped as Mineral Resource Zone (MRZ)-2, MRZ-3, and MRZ-4 (refer to Section 4.12, Mineral Resources). As described in Section 4.12, it is unlikely that these sites would be used for mineral resource production in the future, even without project implementation, due to land ownership and existing incompatible land uses at the sites and surrounding areas. Nevertheless, development of residential uses on these sites would eliminate the potential for future extraction of mineral resources. Therefore, the project would result in minor irreversible environmental changes related to the consumption of natural resources and energy, and the elimination of mineral resources extraction sites.

### 5.2.2 Irreversible Environmental Damage

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the project. The project would not be expected to result in environmental accidents that have the potential to cause irreversible damage to the natural or human environment. The project primarily involves the development of residential projects, which do not generate substantial hazardous materials. While construction for new development would result in the limited use, transport, storage, and disposal of common hazardous materials, all activities would comply with applicable federal and state laws related to hazardous materials transport, use, and storage, which would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage. Further, the implementation of MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6 would ensure impacts related to the potential release of hazardous materials into the environment would be less than significant. (Refer to Section 4.9, Hazards and Hazardous Materials, for a more detailed discussion of these issues.)

## 5.3 Growth-Inducing Impacts

As required by Section 15126.2(e) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Additionally, the EIR must

discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity in the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster economic or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or General Plan Amendment approval) or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base or employment expansion). These circumstances are further described below.

### 5.3.1 Elimination of Obstacles to Growth

Elimination of obstacles to growth refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.

The elimination of either physical or regulatory obstacles to growth is considered a growth-inducing effect, although not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As described in Chapter 3, the HEU6 would amend development standards and enact new programs to facilitate the production of housing (e.g., by-right housing ordinance), particularly affordable housing, as necessary to meet the County's Regional Housing Needs Allocation. State law requires that the County provide the capacity and the regulatory framework to accommodate its Regional Housing Needs Allocation "fair share" of the region's housing needs, which cannot be achieved without the proposed revisions to existing development standards and new programs to support housing. The project does not approve the construction of specific development projects; therefore, the project would not directly induce growth but would anticipate and encourage growth by addressing the UMC's existing needs so that the UMC can grow in ways that enhance the quality of life, improve access to jobs, transportation, and housing, and not adversely impact the environment. However, the project would allow increased development intensity compared to existing conditions to meet the Regional Housing Needs Allocation. Further, several opportunity sites are on the boundaries of existing cities and developed communities as well as the boundaries of water and

sewer services areas (e.g., Opportunity Sites 1 through 4, 24 through 26, 52). It is reasonably foreseeable that site access and public services may be extended to serve future housing developments on those sites, which would induce growth in those areas. Therefore, the project could be considered to remove regulatory obstacles to growth and is considered growth-inducing.

However, it should be noted that the County considered sites in priority planning areas and infill when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on natural and working lands (e.g., agricultural and forest lands).

### 5.3.2 Economic Expansion or Growth

Economic effects refer to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project and the indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

The project would affect the local economy through the construction of new residences that would encourage people to live in the UMC and would help encourage people to stay in the UMC to take advantage of the proximity to local shops, restaurants, and other amenities in nearby urban areas.

## 5.4 Conclusion

The project is a long-term planning document that would result in significant and unavoidable impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, greenhouse gas emissions, hydrology and water quality (groundwater recharge and supply), land use and planning, transportation (vehicle miles traveled), and utilities and service systems (water infrastructure and supply). The project would also result in significant and irreversible environmental impacts due to the irreversible consumption of natural resources and energy and growth-inducing impacts due to the buildout of residential development and associated infrastructure on 56 opportunity sites.

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# Chapter 6 Alternatives

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe a reasonable range of alternatives to the project that could feasibly attain most of the project objectives while avoiding or considerably reducing one or more of the significant impacts of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (Section 15126.6[f] of the CEQA Guidelines). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time while also taking into account economic, environmental, social, technological, and legal factors (Section 15126.6[f][1] of the CEQA Guidelines). CEQA does not require either that an EIR analyze alternatives at the same level of detail as the project or that an EIR consider and analyze every conceivable alternative.

Through this process, the County of Monterey identified nine possible alternatives to the proposed County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). Of these, six were dismissed from further consideration because they either did not meet most project objectives or were not considered potentially feasible. Two were identified as project alternatives to be evaluated, in addition to the No Project Alternative required by CEQA. This chapter describes how the project alternatives were developed, evaluates the alternatives in comparison to the project, and identifies the environmentally superior alternative.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description.

For the purposes of the PEIR, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

# 6.1 Development of Alternatives

## 6.1.1 Criteria for Selection

The criteria for the selection and analysis of alternatives are provided in Section 15126.6(c) of the CEQA Guidelines. The County selected its alternatives based on such criteria, all of which are listed below:

- The extent to which the alternative would feasibly accomplish most or all of the basic objectives (Section 15126.6[a] of the CEQA Guidelines);
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, General Plan consistency, and consistency with other applicable plans and regulatory limitations (Section 15126.6[a] of the CEQA Guidelines);
- The extent to which the alternative would avoid or substantially lessen any of the identified significant environmental impacts of the project (Section 15126.6[a] of the CEQA Guidelines);
- Any alternatives that were suggested during the scoping period for the project;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice (Section 15126.6[c] of the CEQA Guidelines); and
- The requirement of the CEQA Guidelines to consider a "no project" alternative and to identify an "environmentally superior" alternative in addition to the No Project Alternative (Section 15126.6[e] of the CEQA Guidelines).

### 6.1.1.1 Project Objectives

As described in Section 3.1, Project Objectives, the fundamental purpose of the project is to meet state housing law and comply with the Association of Monterey Bay Area Governments Final Sixth Cycle Regional Housing Needs Allocation (RHNA) Plan 2023–2031. The County, as the lead agency, identified the following objectives for the project:

1. Prepare a compliant Housing Element that meets the state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031 while balancing economic, environmental, and social concerns.
2. Develop housing policies and programs to facilitate development of new units and preserve existing housing for residents at all income levels to address factors contributing to the statewide housing shortage.
3. Meet the housing needs of all economic segments of community members who live in the UMC areas in a manner that affirmatively furthers fair housing and supports the overall goal of providing safe and decent housing.
4. Provide a range of housing opportunities as near as possible to jobs, transit, services, and schools.

5. Provide adequate buffer with additional RHNA units to comply with the purpose of Senate Bill 166 (No Net Loss Law) and ensure implementation of the HEU6.
6. Update the 2010 General Plan, LCP, Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan, LCP, and County Code into conformance with state housing law.
7. Provide CEQA streamlining for housing development consistent with the HEU6, 2010 General Plan, LCP, and County Code.

#### 6.1.1.2 Feasibility

Section 15126.6(f)(1) of the CEQA Guidelines identifies the factors to consider to determine the feasibility of potential project alternatives: site suitability; economic viability; availability of infrastructure; General Plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the project proponent can reasonably acquire, control, or otherwise have access to the alternative site. None of these factors establishes a fixed limit on the scope of reasonable alternatives. Finally, an alternative need not be considered if its environmental effects cannot be reasonably ascertained, and if implementation of such an alternative is remote or speculative.

#### 6.1.1.3 Evaluation of Significant Impacts

The CEQA Guidelines, Section 15126.6 (f), states that "alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." Alternatives that do not avoid or substantially lessen at least one significant impact of the project do not need to be analyzed in an EIR.

As described in Chapter 4, Environmental Analysis, and summarized in Table ES-1 in the Executive Summary, the project would result in potentially significant impacts (before mitigation) for the following CEQA resource topics: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils (paleontological resources), greenhouse gas (GHG) emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, transportation, Tribal Cultural Resources, utilities and service systems, and wildfire. Impacts related to aesthetics, agriculture and forestry resources, air quality, biological resources, GHG emissions, hydrology and water quality (groundwater recharge and supply), land use and planning, transportation (vehicle miles traveled [VMT]), and utilities and service systems (water supply) would remain significant and unavoidable. All other significant impacts identified in Chapter 4 of this PEIR would be reduced to below a level of significance through the implementation of the mitigation framework identified in Chapter 4 and through compliance with applicable federal, state, regional, and local law and regulations.

The project would result in less than significant impacts without mitigation for the following resource topics: energy, geology and soils (except paleontological resources), mineral resources, and population and housing.

### 6.1.2 Alternatives Suggested During the Scoping Process

The Notice of Preparation for the project was issued on October 21, 2024, and a public scoping meeting was held on November 7, 2024. The Notice of Preparation, written comments received, and a summary of the comments are included in Appendix A.

The scoping comments included the following suggested project alternatives and features. The description below also indicates if the alternative has been carried forward for evaluation or dismissed from further consideration.

One public scoping comment from LandWatch Monterey County suggested the need to remove several opportunity sites from the Sites Inventory to avoid significant adverse impacts related to agriculture, transportation (VMT), GHG and air pollutant emissions, biological resources, and "other impacts related to development in rural Greenfield areas rather than urbanized infill areas." The opportunity sites suggested for removal include Sites 1, 2, 24 through 26, 40, 47, 48, and 52.[1] The alternatives evaluated below consider elimination of the majority of the sites suggested for removal by LandWatch Monterey County.

### 6.1.3 Alternatives Considered and Eliminated During the Project Planning Process

Section 15126.6(c) of the CEQA Guidelines provides that an EIR should both identify alternatives that were considered by the lead agency but were rejected and briefly state the reasons underlying the lead agency's determinations. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are the failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental effects.

The following section describes alternatives or alternative concepts that were given consideration by the lead agency but rejected from further analysis in the PEIR.

The project objective to "meet the state-mandated Sixth Cycle RHNA for the County" was given particular importance because not doing so could have potentially serious consequences for the County, including limited access to state funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its General Plan is at risk of being deemed inadequate and, therefore, invalid. If a jurisdiction is sued over an inadequate General

[1] The public scoping comment from LandWatch Monterey County referred to a previous iteration of Opportunity Site 52, which was removed and replaced with a new Opportunity Site 52 in a different location. The public controversy regarding new Opportunity Site 52 is discussed under Potential Areas of Controversy and Issues to Be Resolved in the Executive Summary of this PEIR.

Plan, the court may impose requirements for land use decisions until the jurisdiction brings its General Plan, including its Housing Element, into compliance with state housing law.

#### 6.1.3.1 RHNA Only Alternative

As described in Chapter 3, Project Description, the California Housing and Community Development Department (CA HCD) recommends a buffer of 15 to 30 percent or more units in each income category to account for potential site-specific constraints or delays in development, particularly for lower-income housing. This buffer complies with the purpose of Senate Bill 166 (No Net Loss Law) to ensure that the County maintains adequate capacity throughout the 8-year planning period. This alternative would include only enough opportunity sites in the Sites Inventory to meet the state-mandated RHNA; it would not provide a buffer for additional units in any of the income categories. This alternative was rejected from further consideration because the proposed reduction in overall units would not meet the project objective to "provide adequate buffer with additional RHNA units to comply with the purpose of Senate Bill 166 (No Net Loss Law)" and would result in an unapproved Housing Element by CA HCD. Further, this alternative would be inconsistent with the No Net Loss Law.

#### 6.1.3.2 Alternative Sites Inventory Alternative

This option is an "Off-Site" or "Alternative Sites" alternative. An "Alternative Sites" alternative would include a revised Sites Inventory with different opportunity site locations in the UMC, as well as potentially different densities and other zoning assumptions. There are theoretically infinite possible alternative site choices for opportunity sites. This option was rejected primarily because of the nature of the project. The RHNA was mandated specifically for the UMC. The opportunity sites and proposed zoning were chosen to comply with state housing law and local requirements, to ensure a compliant Housing Element. To do so, sites and zoning were chosen based on proximity to existing urban development and public services and utilities, and to provide sufficient housing capacity to meet the RHNA target with a reasonable capacity buffer. There are a number of sites that were considered for the Sites Inventory and ultimately excluded for various reasons. For instance, Site 7 is a feasible alternative site but was removed from the Sites Inventory and replaced by Site 53 at the request of the City of Marina.[2] Other sites considered were eliminated due to impacts on resources (e.g., visual resources, biological resources), infrastructure (e.g., water, sewer) constraints, urban sprawl, and property owner requests. In addition, the County conducted a robust community engagement process to refine and balance site selection. Therefore, there are several sites that County staff may not have considered originally but were ultimately added to or eliminated from the Sites Inventory based on community input and at the request of property owners. This deliberative process occurred primarily before the HEU6 was submitted for review by CA HCD.

[2] Both Site 7 and Site 53 are owned by the University of California.

#### 6.1.3.3 Expansion into Open Space Alternative

The Expansion into Open Space Alternative would focus more opportunity sites on peripheral sites and undeveloped land, both to reduce neighborhood opposition from increased density and to allow for easier lot consolidation or land assemblage of large housing sites.[3] However, this alternative was rejected from further consideration because it would increase sprawl, VMT, GHG emissions, infrastructure costs, and potential wildfire exposure.

#### 6.1.3.4 Infill Only Alternative

This alternative would focus all opportunity sites in infill areas of the UMC only. These could include vacant urban parcels, commercial conversions, and urban or "downtown" areas of the UMC. The Infill Only Alternative supports the intent of Senate Bill 375, smart growth, and other climate goals since it would focus development closer to existing commercial uses (e.g., employment, shopping, restaurants), thereby encouraging active transportation, transit use, shorter vehicle trips for reduced VMT and associated criteria air pollutants (air quality), and GHG emissions. This alternative would also reduce potential impacts related to wildfire since it would focus development in already developed areas of the UMC rather than in the Wildland-Urban Interface (WUI). However, this alternative was rejected from further consideration due to insufficient housing capacity to meet the RHNA target with a reasonable capacity buffer and potential displacement of existing urban uses in infill areas. For instances, communities within UMC with capacity for infill development include Pajaro, Castroville, Chuluar, Boronda, San Ardo, San Lucas, and Bradley, which are generally small communities. The Sites Inventory includes infill sites in these communities where opportunity exists. However, the capacity of these sites alone is insufficient to meet the County's RHNA. Additionally, all of the unincorporated communities listed above are considered disadvantaged communities,[4] and locating opportunity sites exclusively in these areas would conflict with state requirements for Affirmatively Furthering Fair Housing.[5] Given that all housing units would be in existing urbanized areas, this alternative would meet neither state requirements nor the project objective to meet housing needs of all economic segments of community members, furthering fair housing.

#### 6.1.3.5 Transit-Oriented Development Alternative

The Transit-Oriented Development Alternative would focus opportunity sites around existing and planned transit facilities. This alternative was considered as a potential option to reduce impacts

[3] Lot consolidation or assemblage typically facilitates increased residential development capacity (CA HCD 2020).

[4] Disadvantaged communities are defined by Senate Bill 1000 as those disproportionally burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution. The Governor's Office of Land Use and Climate Innovation updated its General Plan Guidelines to provide guidance on the preparation of General Plan Environmental Justice Elements in compliance with SB 1000, including recommendations on screening methods to identify disadvantaged communities. The County uses these screening methods in its Draft Environmental Justice Element to identify disadvantaged communities within UMC.

[5] The Affirmatively Furthering Fair Housing Act (Assembly Bill 686) requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

related to VMT. However, this alternative was rejected from further consideration because there are no high-quality transit facilities or hubs in UMC. As described in Section 4.11, Land Use and Planning, and Section 4.16, Transportation, not all opportunity sites have convenient access to public transit because some areas in the UMC are not adequately served by the existing transit system. Of the 56 opportunity sites included in the Sites Inventory, 51 sites are within 0.5 mile of existing transit stops; however, several opportunity sites are in areas that have gaps in the pedestrian network and do not currently provide direct connections to established transit networks, and even for sites that do have connections, the transit network is not considered high quality. In some cases, transit facilities such as bus stops may be nearby, but bus routes and service frequencies are limited. Therefore, implementation of the Transit-Oriented Development Alternative would not adequately address VMT-related impacts.

#### 6.1.3.6 Reduced Wildfire Risk Alternative

This alternative would avoid opportunity sites in WUI areas, Very High Fire Hazard Severity Zones (FHSZs), and on slopes greater than 25 percent to reduce the risk of exposure to the uncontrolled spread of a wildfire. The Reduced Wildfire Risk Alternative was rejected from further consideration because many of the opportunity sites and other potential housing locations in UMC are in WUI areas, Very High FHSZs, and/or on slopes greater than 25 percent. Consequently, removing these sites from the Sites Inventory would preclude the County from providing sufficient housing capacity to meet the RHNA target with a reasonable capacity buffer. Further, implementation of existing federal, state, and local laws and regulations, as well as the mitigation measures identified in Section 4.19, Wildfire, were determined to reduce the wildfire impact to less than significant. Therefore, there are no significant and unavoidable impacts related to wildfire.

## 6.2 Alternatives Evaluated in the Draft EIR

The following alternatives are analyzed in this chapter:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Agricultural Preservation Alternative
- **Alternative 3:** Water Conservation Alternative

The alternatives considered were evaluated for their potential feasibility and their ability to achieve most of the project objectives and reduce project impacts. These alternatives were determined to adequately represent the range of feasible alternatives required under CEQA for the project. The No Project Alternative is included, as required by CEQA Guidelines, Section 15126.6(e), although it would not meet the basic project objectives. Both Alternative 2 and Alternative 3 are potentially feasible options that could meet or partially meet all of the project objectives. Detailed descriptions of the alternatives are presented below, along with an evaluation of their environmental impacts.

### 6.2.1 Alternative 1: No Project Alternative

The discussion of the No Project Alternative must examine the existing conditions and reasonably foreseeable future conditions that would exist if the project were not approved based on current plans and consistent with available infrastructure and community services (Section 15126.6[e] of the CEQA Guidelines). The No Project Alternative assumes that the project would not take place. In this scenario, the 56 opportunity sites would not be incorporated into the HEU6 Sites Inventory and there would be no change in zoning or General Plan land use designations on any sites. The No Project Alternative in this case represents the continuation of existing zoning and General Plan designations and full buildout under those existing designations is assumed to occur under this Alternative. Typical development assumptions are included in the analysis of this alternative below, including compliance with applicable regulations or typical County-required measures.

However, as a consequence of non-compliance with state-mandated requirements, this alternative assumes that some housing projects in the UMC would use "Builder's Remedy" provisions of state housing law and not comply with existing zoning requirements.[6] Without an adopted, substantially compliant Housing Element, "Builder's Remedy" law allows for applicants to propose housing development projects (including mixed-use projects) in any zoning district, at densities that would not typically be allowed, or that otherwise do not comply with local standards. As such, the No Project Alternative could result in some housing projects in the UMC proceeding through use of the "Builder's Remedy" in addition to other Housing Accountability Act tools or court orders. Development accommodated by these tools rather than a certified Housing Element could result in inconsistencies with the General Plan and potentially undesirable patterns of development, such as urban sprawl and development in areas of UMC where growth is not planned or in areas without water, sewer, and other public services or public transportation. Alternatively, Builder's Remedy projects could result in lower than ideal housing densities in areas already served by water and sewer utilities.[7]

While some Builder's Remedy projects may be larger and include more intensive development than is allowed under existing zoning and land use designations, other Builder's Remedy projects may be consistent with or smaller/less intensive than the planned density. Because the No Project Alternative would not rezone any sites to High Density Residential (HDR) as the project would,

[6] The "Builder's Remedy" refers to a provision under the Housing Accountability Act that limits local jurisdictions without a state-certified Housing Element ability to deny certain housing projects that meet specific affordability criteria, even if the project does not comply with the local General Plan or zoning. Generally, there is no limit on the maximum size of a builder's remedy project in state law, although the minimum size is two dwelling units and recently enacted legislation imposes some density limits. When processing builder's remedy applications, the County is still required to adhere to the California Coastal Act, implemented through the County's Local Coastal Program, and CEQA (refer to California Government Code, Section 65589.5[e]). However, it is possible that a Builder's Remedy project may be combined with ministerial streamlining, such as SB 2011 or SB 35, allowing the County to process it ministerially (County HCD 2026).

[7] The County can deny Builder's Remedy applications if it is found that the housing development or emergency shelter would have a specific adverse impact on public health and safety, and there is no way to mitigate or avoid the impact without making the development unaffordable. The impact must be based on objective, written public health or safety standards in place when the application was deemed complete.

individual projects proposed under the No Project Alternative could be smaller than the density and intensity of development assumed for opportunity sites under the project. Additionally, the No Project Alternative would not facilitate housing developments to the same extent as the proposed project without implementation of the housing programs included in the HEU6 that are specifically designed to encourage and facilitate a variety of housing types in UMC. County processing for Builder's Remedy projects could require significant staff resources thereby competing with resources needed to permit large residential projects exceeding the planned density and intensity of development. Because of the reasons described above, this PEIR assumes that, overall, both fewer and smaller residential developments would occur under the No Project Alternative compared to the project.

This alternative would not accomplish any of the project objectives (refer to Table 6-2, Ability of Project Alternative to Meet the Project Objectives). Additionally, the Builder's Remedy projects that would occur under the No Project Alternative would allow for unplanned housing growth that could result in significant impacts on several resource areas, such as aesthetics, agricultural and forest resources, biological resources, cultural resources, GHG emissions, land use and planning, and transportation, as described further below. However, the PEIR evaluates the No Project Alternative because it is required by Section 15126.6(e) of the CEQA Guidelines. As described in Section 6.3, Environmentally Superior Alternative, the County would face serious consequences if the No Project Alternative is implemented (i.e., no compliant Housing Element is adopted).

#### 6.2.1.1 Impact Analysis

### Aesthetics

As described above, some Builder's Remedy projects could develop at higher densities than is allowed by existing land zoning and land use designations; however, without the rezoning or implementation of the HEU6 programs designed to encourage and facilitate housing development included as part of the project, this analysis assumes that the No Project Alternative would result in development of fewer and smaller housing units compared to the proposed project. As such, the No Project Alternative could result in reduced impacts on visual resources. As described in Section 4.1, Aesthetics, applicable General Plan and Local Coastal Program – Land Use Plans (LCP – LUP) policies, zoning regulations, design standards, CEQA review process, and project-level review procedures are intended to minimize visual incompatibilities, reduce potential obstruction of scenic vistas, and preserve significant natural features. However, Builder's Remedy would allow for development proposals that do not comply with applicable General Plan, zoning regulations, and design standards. Therefore, these regulatory requirements, intended to reduce the severity of incremental visual changes in the UMC, may not be applied to future development under the No Project Alternative. Discretionary housing developments under this alternative would be evaluated for potential impacts on visual resources and mitigated, as necessary, on a project-by-project basis under CEQA.

Although the scale of development would be substantially reduced under the No Project Alternative compared to the project, Builder's Remedy projects could result in significant impacts related to aesthetics because compliance with applicable General Plan, zoning regulations, and other local design standards would not be required for projects that meet certain affordability criteria. Furthermore, Mitigation Measure (MM-) AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3, which require objective design standards and visual protection measures, would not be applied to future housing projects under the No Project Alternative. Therefore, impacts on aesthetics could be significant and unavoidable and would be increased from the project.

### Agriculture and Forestry Resources

As described in Section 4.2, Agriculture and Forestry Resources, none of the opportunity sites are currently under Williamson Act Contract. However, Opportunity Sites 1 and 2 are zoned F/40 (Farmland, 40 acres per dwelling unit), and Opportunity Sites 5 and 6 are zoned MDR/4-A-UR (Medium Density Residential/4 units per acre-Limited Agricultural-Urban Reserve) with the Limited Agricultural overlay district. The No Project Alternative would not rezone these sites as HDR. Therefore, the No Project Alternative may substantially reduce this impact compared to the project, given that no agriculturally zoned sites would be rezoned to HDR. However, it should be noted that Site 1 was included in the Sites Inventory because the property owner is highly interested in residential development on that site.

Additionally, because this alternative would not result in a compliant Housing Element, possible Builder's Remedy projects could develop on properties zoned for agriculture under this alternative. As noted in Section 4.2, the County considered sites in priority planning areas and infill when selecting opportunity sites to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development, and to avoid development on agricultural lands. Sites with agricultural resources and forest land or timberland resources included in the Sites Inventory were only chosen if in already identified growth areas and adjacent to urbanized areas. The No Project Alternative would allow for Builder's Remedy projects that could result in conversion of farmlands and forest lands in other areas of UMC that are not adjacent to urbanized areas.

Moreover, buildout of the No Project Alternative would still include residential development on sites either mapped as Important Farmland or considered forest land and/or timberland, which are currently zoned for residential development (e.g., Sites 3, 5, 8, 16, 18 through 22, 26, 37, 40, 43, 45, 48, and 56). In addition, opportunity sites with active agricultural uses could still be developed with residential uses and take active agriculture out of production, given that some existing zoning designations allow for residential development (e.g., at Sites 19, 26, and 37), although this could be a lesser scale than the project due to the reduced scale of development that would likely occur under the No Project Alternative. Therefore, impacts on agricultural resources could be reduced compared to the project due to the reduced scale of development and because this alternative would

not directly rezone sites to HDR. However, because the No Project Alternative could result in Builder's Remedy development on properties zoned for agriculture, mapped as Important Farmland, or considered forest land and/or timberland, this alternative would still result in significant and unavoidable impacts on agriculture and forestry resources.

### Air Quality

The No Project Alternative would continue to allow development under existing zoning and land use designations. As described in Section 6.2.1, Alternative 1: No Project Alternative, some Builder's Remedy projects could develop at higher densities than what is allowed by existing land zoning and land use designations; however, without the HDR rezones or implementation of the HEU6 programs designed to encourage and facilitate housing development included as part of the project, this analysis assumes that the No Project Alternative would result in development of fewer housing units compared to the proposed project. Therefore, buildout of the No Project Alternative may not exceed the growth projections used in the Monterey Bay Air Resources District 2012–2015 Air Quality Management Plan, as the project would. Additionally, due to the reduction in scale of development that would likely occur under the No Project Alternative, temporary construction-related air quality impacts from grading and construction activities and long-term air quality impacts from building operation (e.g., energy usage, maintenance) would be lower than those described for the project. As such, air quality impacts would be reduced compared to the project. However, without detailed air quality modeling to estimate projected criteria air pollutant emissions under this alternative and due to the potential for large Builder's Remedy projects, the PEIR conservatively assumes that total daily emissions would not be reduced to below the Monterey Bay Air Resources District emissions thresholds because a finding of no impact cannot be made without evidence. Therefore, impacts related to criteria air pollutant emissions would remain significant and unavoidable, similar to the project.

### Biological Resources

The No Project Alternative would result in substantially less overall future residential growth in the UMC than the project (refer to Section 6.2.1). Such growth would be constrained by existing adopted plans, policies, and regulations, including the County's adopted development standards for biological resource protection. Residential development would continue to be subject to the applicable policies and standards in the 2010 General Plan, Community and Area/Master Plans, 1982 General Plan (for coastal areas), the County's zoning ordinances, LCP – LUP, and other applicable regulations of the County Code. Future residential development within 100 feet of an environmentally sensitive habitat would be subject to the County's biological survey requirements under County Code, Sections 20.66.020 (coastal) and 21.66.020(C) (inland). Additionally, Section 21.64.260 of the County Code, as well as Sections 20.144.050 and 20.146.060 of the Coastal Implementation Plan, provide procedures and requirements for tree removal. Several Community and Area/Master Plans also include policies and development standards for environmentally

sensitive habitat and trees, such as setbacks, avoidance, and construction requirements. Additionally, County Code, Sections 20.66.020 (coastal, set forth in Parts 2-5 of the Monterey Coastal Implementation Plan) and 21.66.020(D) (inland, in the Code section), set forth development standards protecting biological resources, including requiring the use of native species consistent with and found in the project area, conditions of approval to avoid significant impacts on rare, threatened and endangered birds during their breeding and nesting seasons, and limiting removal of Indigenous vegetation and land disturbance within 100 feet of environmentally sensitive habitats. Continued compliance with these plans, policies, and regulations, as well as the overall reduction in development, would ensure that impacts on biological resources under the No Project Alternative would be less adverse than those described for the project in Section 4.4, Biological Resources. Therefore, development under the No Project Alternative would be less than significant with implementation of state and County laws and regulations.

### Cultural Resources

The No Project Alternative would allow development at a smaller scale than under the project but could still entail ground disturbance or excavation activities on vacant or undeveloped sites. Further, the project selected opportunity sites based on proximity to existing urban development, public services, and utilities to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development. Under the No Project Alternative, residential development would occur in existing residentially zoned sites and could also occur in zones where residential use is not allowed through Builder's Remedy applications. Therefore, the No Project Alternative leaves the potential for applicants to develop in rural areas of the UMC, which could contain previously undisturbed, buried archaeological resources and human remains. Ground disturbance from development allowed under existing zoning would still have potential impacts on archaeological resources and human remains. Additionally, the potential for the No Project Alternative to result in impacts on historical resources would be similar to the project, although future residential developments would likely undergo environmental review under the CEQA process to ensure direct impacts of residential development would be mitigated to the greatest extent feasible. Therefore, impacts would be similar to the project.

### Energy

As described in Section 6.2.1, some Builder's Remedy projects could develop at higher densities than what is allowed by existing land zoning and land use designations; however, without the HDR rezones or implementation of the HEU6 programs designed to encourage and facilitate housing development included as part of the project, this analysis assumes that the No Project Alternative would result in development of fewer housing units compared to the proposed project. Therefore, construction- and operation-related energy use from development allowed under the No Project Alternative would be less than under the project. Impacts would be reduced compared to the project and would remain less than significant.

### Geology and Soils (Paleontological Resources)

The No Project Alternative would allow for development involving construction or ground disturbance that could expose and loosen soils and increase the potential for erosion. While the opportunity sites are outside Alquist-Priolo fault zones, development under the No Project Alternative could occur in other areas of the UMC. As described for future construction under the project, development under the No Project Alternative would be required to comply with California Building Code requirements, ensuring the stability of new structures during seismic events or due to expansive soils. Further, the County could deny Builder's Remedy projects that have a significant, adverse impact on public health and safety as it relates to geological and soil stability of the site and proposed development.

Development allowed under the No Project Alternative, similar to development facilitated by the project, would occur in areas of high paleontological sensitivity; however, development allowed under the No Project Alternative would be typically smaller in scale and scope than allowed under the project (refer to Section 6.2.1). Additionally, developers with projects in the inland UMC would be required to complete Phase I (reconnaissance level) paleontological reviews in any formation known to yield important elements of the fossil record in accordance with Policy OS-7.1 of the 2010 General Plan Conservation and Open Space Element. Developers with projects in the coastal UMC would be required to comply with development standards in the applicable Coastal Implementation Plan. In the North County Coastal and Carmel Area LUP areas, mitigation plans are required for where construction on or reconstruction impacts on an identified archaeological or paleontological site cannot be avoided. Impacts would be similar to the project.

### Greenhouse Gas Emissions

As described in Section 6.2.1, some Builder's Remedy projects could develop at higher densities than what is allowed by existing land zoning and land use designations; however, without the HDR rezones or implementation of the HEU6 programs designed to encourage and facilitate housing development included as part of the project, this analysis assumes that the No Project Alternative would result in development of fewer housing units compared to the proposed project. Temporary construction-related GHG emissions that result from grading and construction of new development and long-term impacts resulting from building operation (e.g., energy use, maintenance, and traffic) would be lower than under the project. Rather than being streamlined under the HEU6, residential developments under the No Project Alternative would likely undergo environmental review under the CEQA process with a project-specific analysis and project-specific mitigation measures as necessary to minimize potential effects of the development. Therefore, impacts would be reduced compared to the project.

### Hazards and Hazardous Materials

Under the No Project Alternative, the transport, storage, and use of hazardous materials associated with construction and operation of development, such as paints and solvents, would be required to occur in accordance with applicable regulations, similar to the project. Where known soil or groundwater contamination exists, remediation and compliance with federal, state, and local regulations would be required and enforced by the Certified Unified Program Agency (i.e., County Hazardous Materials Management Services) to allow for development. However, the No Project Alternative could result in impacts related to previously undiscovered soil or groundwater contamination without the implementation of the Phase I Environmental Site Assessments (ESAs) and Phase II ESAs and soil sampling, as necessary, under MM-HAZ-OBJ-1, MM-HAZ-CONS-2, MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6. Nevertheless, under the No Project Alternative, the location of residential developments would be evaluated for potential hazardous materials sites on a project-by-project basis. Moreover, discretionary projects would undergo environmental review under the CEQA process to ensure impacts related to hazardous materials would be mitigated to the greatest extent feasible. Further, the County could deny Builder's Remedy projects that have a significant, adverse impact on public health and safety as it relates to hazardous materials contamination at or beneath the specific site.

Similar to the project, any sites in airport safety zones would be required to comply with applicable height and development restrictions to avoid safety hazards to aircraft and airport operations, or to prepare a Notice of Intent to Overrule an Airport Land Use Commission Determination. Impacts would therefore be less than significant, slightly reduced from the project's impacts.

### Hydrology and Water Quality

The No Project Alternative would allow development that could include construction activities that would loosen and expose soils, otherwise increase the potential for soil erosion and sedimentation, and create new or additional impervious surfaces. Due to the more limited extent of development that can occur under the No Project Alternative (refer to Section 6.2.1), these impacts would be less than those under the project. Similar to the project, development allowed under the No Project Alternative would be required to comply with federal, state, and local regulations for stormwater management, erosion control, site drainage, and flood control (e.g., National Pollutant Discharge Elimination System Construction General Permit, municipal separate storm sewer system permit, Stormwater Pollution Prevention Plan, Monterey County Stormwater Ordinance, Monterey County Erosion Control Ordinance, Post-Construction Stormwater Management Requirements [PCRs]). As such, impacts related to surface and groundwater quality, site drainage and hydrology, and flood hazards would be less than significant as described for the project. The smaller total buildout allowed under existing zoning would result in slightly reduced severity of impacts on groundwater recharge and supplies than the project. However, given the critical importance of groundwater in UMC, any new development could result in impacts on

groundwater recharge and supplies. While implementation of MM-HYD-OBJ-1 and MM-HYD-CONS-2 would not occur under the No Project Alternative, development projects would likely be evaluated on a project-by-project basis under the CEQA process. Further, the County could deny Builder's Remedy projects that have a significant, adverse impact on public health and safety, including a lack of sufficient groundwater supply to support the development. Therefore, impacts would be similar to and slightly reduced compared to the project. However, impacts on groundwater recharge and supplies would remain significant and unavoidable.

### Land Use and Planning

Under the No Project Alternative, the opportunity sites would retain their existing zoning, allowing future buildout in accordance with that zoning. Similar to the project, the No Project Alternative would not alter connectivity with adjacent areas or divide established communities. Future development under the No Project Alternative would be required to comply with federal, state, and local laws and regulations, similar to the project. However, without an adopted Housing Element under the No Project Alternative, Builder's Remedy projects could proceed, allowing for development proposals that do not comply with applicable General Plan and zoning regulations and design standards. Therefore, impacts on land use and planning would be increased compared to the project and would still be significant and unavoidable.

### Mineral Resources

The No Project Alternative would allow development under existing zoning on residentially zoned sites, which are not on mineral resources extraction sites. As described for the project, potential housing sites throughout the UMC are mapped in or partially in MRZ-2, which denotes areas where adequate information indicates that significant mineral resources are present or likely to be present, and MRZ-3, which represents areas where the significance of mineral resources cannot be evaluated due to limited data. However, these sites are unlikely to be used for mineral resource production, even without future residential development on the sites, due to existing zoning, current on-site and adjacent uses, and ownership of the sites. Under the No Project Alternative, applicants for each individual residential project in UMC that would eliminate the potential for extraction of mineral resources would need to prepare a Statement of Reasons to extinguish mineral resources, in accordance with California Public Resources Code (PRC), Sections 2762 and 2763. With preparation of a Statement of Reasons for any development that would eliminate the potential for extraction of the mineral resources, impacts on mineral resources would be less than significant, similar to the project.

### Noise

As described in Section 6.2.1, some Builder's Remedy projects could develop at higher densities than what is allowed by existing land zoning and land use designations; however, without the HDR rezones or implementation of the HEU6 programs designed to encourage and facilitate housing

development included as part of the project, this analysis assumes that the No Project Alternative would result in development of fewer housing units compared to the proposed project. As such, reduced impacts associated with temporary construction-related noise would result from grading and construction of development. Less intensive long-term noise impacts resulting from building operation would also occur. Future residential development projects in the UMC would be required to comply with applicable noise regulations, including 2010 General Plan Safety Element policies and best management practices in compliance with County Code Chapter 10.60, Noise Control. Therefore, noise impacts would be both less than significant and reduced compared to the project.

### Public Services

Development allowed under the No Project Alternative would incrementally increase demand for public services compared to existing conditions; however, this increase in demand would be substantially less than under buildout of the project due to the reduced scale of development allowed. The No Project Alternative would not include mitigation measures, requiring payment of development impact fees for future residential projects (MM-PS-OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4); however, the capacity of existing public services to meet future demand of individual housing projects would be evaluated on a project-by-project basis. Due to the reduction in projected housing units (and associated demand for public services), impacts under the No Project Alternative would be substantially reduced compared to the project. Further, the County could deny Builder's Remedy projects that have a significant, adverse impact on public health and safety, including the inability of the existing fire and police services to meet increased demand. Therefore, impacts related to public services would remain less than significant under the No Project Alternative.

### Recreation

Development allowed under the No Project Alternative would incrementally increase demand for recreational facilities compared to existing conditions; however, this increase in demand would be substantially less than under buildout of the project due to the reduced scale of development allowed. The No Project Alternative would not include mitigation measures, requiring provision of on-site parkland/open space or payment of fair share in-lieu fees for future residential projects (MM-REC-OBJ-1 and MM-REC-CONS-2); however, the ability of existing recreational facilities to meet future demand of individual housing projects would be evaluated on a project-by-project basis. Due to the reduction in projected housing units (and associated demand for recreational facilities), impacts under the No Project Alternative would be substantially reduced compared to the project. Therefore, impacts related to public services would less remain than significant under the No Project Alternative.

### Transportation

Under the No Project Alternative, temporary construction-related traffic impacts from worker vehicle trips and vendor/hauling trips and long-term transportation impacts from operational vehicle trips would be substantially lower than for the project. No additional impacts related to hazardous design features or inadequate emergency access would occur under the No Project Alternative because discretionary projects would be subject to CEQA environmental review and would require mitigation to reduce potential significant impacts on the extent feasible. Further, the County can deny Builder's Remedy applications if it is found that the housing development or emergency shelter would have a specific adverse impact on public health and safety, and there is no way to mitigate or avoid the impact without making the development unaffordable. Therefore, as described for the project, impacts related to these topics would be less than significant.

The No Project Alternative would allow for Builder's Remedy projects, which could occur outside planned growth areas away from existing and planned multimodal facilities. Therefore, the No Project Alternative could increase impacts related to multimodal facilities and associated impacts on VMT. The No Project Alternative assumes a business as usual VMT scenario; therefore, it is unlikely that buildout under the No Project Alternative would achieve 15 percent below existing average VMT per capita. Due to the less intensive development expected to occur under the No Project Alternative, impacts would be reduced compared to the project. Nevertheless, without comprehensive transportation modeling to estimate projected VMT under this alternative, this PEIR conservatively assumes that VMT would not be reduced to 15 percent below existing average VMT per capita because a finding of reduced impact cannot be made without evidence. Therefore, impacts would remain significant and unavoidable.

### Tribal Cultural Resources

The No Project Alternative would allow development at a smaller scale than under the project but could still entail ground disturbance or excavation activities on vacant or undeveloped sites. Further, the project selected opportunity sites based on proximity to existing urban development, public services, and utilities to grow areas where there is existing infrastructure and already identified growth areas, to avoid sprawl or haphazard development. Under the No Project Alternative, residential development would occur in existing residentially zoned sites and could also occur in zones where residential use is not allowed through Builder's Remedy applications. Therefore, the No Project Alternative leaves the potential for applicants to develop in rural areas of the UMC, which could contain previously undisturbed, buried Tribal Cultural Resources (TCRs). Ground disturbance from development allowed under existing zoning would still have potential impacts on TCRs. However, future residential developments would likely undergo environmental review under the CEQA process to ensure direct impacts of residential development would be mitigated to the greatest extent feasible. Tribes would be consulted on a project-by-project basis, as applicable for the site location. Therefore, impacts would be similar to and slightly reduced from the project.

### Utilities and Service Systems

Development allowed under existing zoning would occur under the No Project Alternative. Such development would incrementally increase demand for water, wastewater, electricity, natural gas, telecommunications, and solid waste service compared to existing conditions. This increase in demand would be substantially less than under buildout of the project due to the reduced scale of development allowed under existing zoning. However, the expansion of water and wastewater infrastructure would still be required for sites not already adjacent to existing infrastructure. As described in Section 4.18, Utilities and Service Systems, water supply in Monterey County is heavily constrained. The No Project Alternative would not include Housing Element programs or policies that require County coordination with water service providers and suppliers to achieve sub-basin sustainability and water allocations to accommodate future growth. Further, the No Project Alternative would not include mitigation measures, requiring development applications to prove adequate long-term water supply and wastewater treatment capacity (MM-UTL-OBJ-1 and MM-UTL-CONS-2). Consistent with 2010 General Plan Policies PS-1.1, PS-1.3, PS-1.6, PS-3.1, and implemented by Title 15 – Public Services, of the County Code, all discretionary projects will only be approved if the applicant proves that adequate public facilities and services either exist or will be provided concurrent with development, and that adequate long-term water supplies and wastewater services exist to serve the development. Due to the reduction in projected housing units (and associated water demand and wastewater generation), impacts on utilities and service systems under the No Project Alternative would be substantially reduced compared to the project. Further, the County could deny Builder's Remedy projects that have a significant, adverse impact on public health and safety, including a lack of sufficient water supply to support the development. However, given that water supply in Monterey County is heavily constrained, impacts related to water supply would remain significant and unavoidable under the No Project Alternative.

### Wildfire

Under the No Project Alternative, development would be allowed on sites that are mapped in or near state responsibility areas, the WUI, and High or Very High FHSZs, similar to the project. Construction would require building permits and would be required to comply with applicable fire code regulations, including the International Fire Code, International Building Code, California Fire Code, California Building Code, PRC, Title 18 of the County Code, and policies of the 2010 General Plan Safety Element, Areas and Master Plans, Community Plans, and LCP – LUP, which address the siting, construction, occupancy, and protection of development and people as it relates to wildfire hazards. As for the project, future residential development would be required to include fire protection measures, such as automatic sprinkler systems, fire detection and alarm systems, fire breaks, fire-retardant building materials, fuel modification measures, water storage tanks, alternative access routes, and adequate emergency access; thereby reducing the risk of damage from fire. The No Project Alternative would not mandate either evacuation map packets or evacuation educational

materials, as required by MM-WF-OBJ-1, MM-WF-CONS-2, MM-WF-OBJ-3, and MM-WF-CONS-4. Furthermore, Builder's Remedy applications could propose development in the state responsibility areas, WUI, High or Very High FHSZs, and properties with steep slopes. While the No Project Alternative would not include mitigation measures for projects on steep slopes or in state responsibility areas (MM-WF-OBJ-5 and MM-WF-OBJ-6), discretionary projects under the No Project Alternative would still be subject to County Code requirements for development on steep slopes and review by the Board of Forestry and Fire Protection for projects in the state responsibility area. Due to the reduction in development assumed under the No Project Alternative, it is likely that this alternative would reduce impacts related to vehicle congestion during emergency evacuations and development in the state responsibility areas, WUI, and High or Very High FHSZs. Therefore, with compliance with existing state and County laws and regulations, impacts would be both less than significant and decreased compared to the project.

### Cumulative Impacts

The contribution of the No Project Alternative to cumulatively considerable impacts would be slightly reduced compared to the project's contribution to cumulative impacts for the majority of resource areas. However, cumulative impacts would remain significant and unavoidable for aesthetics, agriculture and forestry resources, and land use and planning due to the potential for Builder's Remedy projects to develop in areas not planned for growth and development. Cumulative impacts related to water supply (hydrology and water quality, utilities and service systems) would remain significant due to the critical importance of groundwater in UMC. Additionally, cumulative impacts on air quality, GHG emissions, and transportation may be reduced under the No Project Alternative compared to the project due to the reduced scale of development overall; however, without detailed modeling to estimate projected emissions and VMT under this alternative, the PEIR assumes cumulative impacts would remain significant and unavoidable.

#### 6.2.1.2 Conclusion and Relationship to Project Objectives

Under the No Project Alternative, the HEU6 would not be implemented by the County. This alternative would continue to allow new residential development under the existing applicable County plans and policy framework. However, future housing production within UMC would not address changes to state housing law since the Fifth Cycle (2015–2023) Housing Element, and the County would not achieve the state-required RHNA for the HEU6. This alternative would not accomplish the project objectives to bring the 2010 General Plan or Zoning Ordinance (Inland and Coastal) into conformance with state housing law, including by providing adequate buffer with additional RHNA units to comply with the purpose of Senate Bill 166 (No Net Loss Law). Further, the No Project Alternative would not provide the necessary framework to promote affordable housing production in Monterey County to the same extent as the project. For example, as described in Section 3.5.1, Sites Inventory, the County increased its 2023–2031 RHNA buffer to 17 percent for the extremely low/very low income category and to 34 percent for the low income category, as

recommended by CA HCD.[8] Without the programs and incentives included in the HEU6, the residential development enabled under the No Project Alternative would not achieve the state-mandated lower- and moderate-income affordability targets. Further, the No Project Alternative would not provide CEQA streamlining for housing development consistent with the HEU6, LCP, 2010 General Plan, Zoning Ordinance (Inland and Coastal), and other applicable County regulations.

As described above, the No Project Alternative would not eliminate the significant and unavoidable impacts associated with the proposed project. Additionally, the No Project Alternative would not achieve project objectives and would be inconsistent with state housing and General Plan laws mandating the adoption and implementation of a Housing Element Update for the Sixth Cycle planning period.

### 6.2.2 Alternative 2: Agricultural Preservation Alternative

The Agricultural Preservation Alternative (Alternative 2) would remove selected opportunity sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are currently in use with agricultural activities to reduce the significant and unavoidable impact on agricultural resources described as project impacts in Section 4.2. There are two opportunity sites (Sites 1 and 2) that are currently zoned F/40 and two opportunity sites (Sites 5 and 6) that are currently zoned MDR/4-A-UR with the Limited Agricultural overlay district. Opportunity sites that support agricultural operations include Sites 1, 2, 19, 20, 21, 22, 24, 25, 26, and 37. However, a 74-unit residential project has recently been approved on Sites 20, 21, and 22 through a Builder's Remedy application; therefore, these sites are assumed for buildout under this alternative. The nine remaining opportunity sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or support agricultural operations (Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37), totaling 1,153 units, would be removed from the list of opportunity sites under this alternative to reduce significant and unavoidable impacts on agricultural resources.

It should be noted that the CA HCD recommends a buffer of 15 to 30 percent or more units in each income category to account for potential site infeasibility or delays in development, particularly for lower-income housing. This buffer complies with the purpose of Senate Bill 166 (No Net Loss Law) to ensure that the County maintains adequate capacity throughout the 8-year planning period. To maintain a 15 percent buffer for each income category as recommended by CA HCD, this Alternative would need to replace a total of 95 units in the extremely low/very low income category that would be removed due to the elimination of nine opportunity sites under the alternative. All other income categories would have sufficient units to maintain the 15 percent buffer above the RHNA; however, it is important to note that additional housing units in the other income categories would realistically be included with the extremely low/very low income units in replacement

[8] The CA HCD recommends a 15–30 percent buffer for lower-income (extremely low/very low and low) sites to protect the County from the "no net loss" provision.

housing projects for developers to gain a return on their investment. Therefore, CA HCD requires the Sites Inventory to include assumptions for RHNA distribution among all income categories, rather than assuming developments in the extremely low/very low income category only. To avoid speculating on the number of units needed in other income categories to replace 95 units in the extremely low/very low income category, this alternative includes replacement of the 1,153 total units that would be removed due to elimination of Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37.

To replace the units that would be removed under this alternative, some areas currently zoned as Visitor Serving/Professional Office (VO) in the UMC would be rezoned as High Density Residential with a maximum of 25 dwelling units per acre (HDR/25) or 30 dwelling units per acre (HDR/30). Areas of UMC currently zoned as VO are primarily located along State Route (SR-) 68 and the Carmel River. As such, intensifying development in these areas could result in impacts and concerns related to infrastructure (e.g., water and sewer) constraints, vehicle traffic/congestion, and Affirmatively Furthering Fair Housing considerations. Additionally, VO zoned areas are likely to already be developed with existing uses, and CA HCD limits the percentage of already developed sites that can be included in the Sites Inventory. However, the areas proposed for this zoning change would be focused in more urban areas that have a higher likelihood of existing utilities and public infrastructure in place at or near the VO zoned sites. This would allow the County to provide more housing in areas already planned for development and to avoid development of housing on sites zoned for farmland or currently in use with agricultural activities.

The entire acreage of VO zoning districts would not be buildable due to slope, environmental constraints, and other factors; however, there would be more than enough capacity to replace enough units to maintain the 15 percent buffer. For instance, there are currently 387.8 acres of VO zoning districts in UMC. If all 387.8 acres were replaced with HDR/25 zoning, this would provide capacity for 9,695 units, which is well above the 1,153 units needed to replace the units removed to reduce impacts on agricultural resources. Therefore, to meet the 15 percent buffer for each income category as recommended by CA HCD, this alternative would need to rezone a smaller percentage of the total acreage of VO zoning districts in UMC as HDR/25 or HDR/30.

Although Sites 20, 21, and 22 are currently zoned Low Density Residential, these sites are currently used for agricultural operations. Given that Alternative 2 cannot eliminate impacts on agricultural resources associated with buildout of these three sites due to the approved Builder's Remedy project, the impact on agricultural resources would be reduced in severity but would remain significant and unavoidable, as described further below.

#### 6.2.2.1 Impact Analysis

### Aesthetics

Of the nine opportunity sites that would be eliminated under Alternative 2, three (Sites 19, 24, and 37) are currently located wholly or partially in the Design Control (D) zoning district and are

identified as having sensitive or highly sensitive visual sensitivity. As such, Alternative 2 would reduce impacts on aesthetics by not rezoning these opportunity sites or otherwise removing the existing Design Control (D) zoning overlays and associated protective provisions of the County Code applicable to development on these parcels. Other opportunity sites identified in the HEU6, including those currently located wholly or partially in special visual zoning overlays, would be rezoned under this alternative; therefore, the existing zoning overlays would be removed from these sites, rendering the protective provisions of County Code Chapters 20.44, 21.44, and 20.46 inapplicable to future development on these parcels.

Sites in VO zoning districts are likely to already be developed and/or focused in more urban areas of UMC; therefore, replacement sites in these areas could be considered less visually sensitive. However, the VO zoning districts are predominantly located within Carmel Valley and along State Route 68, which are considered visually sensitive areas (refer to Figure 4.1-2b and Figure 4.1-2c, Visual Sensitivity Areas). Additionally, State Route 68 is a designated State Scenic Highway. By replacing units removed under Alternative 2 with sites in the VO zones, this Alternative could increase impacts to scenic vistas, scenic resources within a State Scenic Highway, and visual character or quality associated with buildout of residential units within Carmel Valley and along State Route 68. Similarly, buildout of replacement units in the two areas of the VO zoning district outside existing urban areas (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1, Visitor Serving/Professional Office Zones in Unincorporated Monterey County) could increase impacts to scenic vistas and visual character or quality associated with residential development on rural, undeveloped land.

As described for the project, proposed future development would be required to comply with the amended zoning code for HDR/25 or HDR/30, and go through project-level staff review during the application process for compatibility with surrounding visual resources by using appropriate siting, design, materials, and landscaping. Also, if the opportunity sites under Alternative 2 have the potential to result in adverse impacts on visual resources, MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 would be incorporated to reduce visual impacts and ensure compatibility with surrounding environment through objective design standards (ODS), tree removal standards, site and building design, building materials, colors, landscaping, and grading, building height, massing, setback, and orientation. MM-AES-OBJ-4 and MM-AES-CONS-5 would require fencing or screening material around active construction areas to reduce visual impacts by obstructing direct public views of construction activities. MM-AES-OBJ-6 would require that new development apply exterior lighting design standards to reduce potential lighting and glare impacts.

However, as described for the proposed project, specific impacts on particular scenic vistas and visual resources are unknown and would be speculative to analyze without project-specific details and fully developed ODS for each area plan, master plan, land use plan, and community plan areas. Therefore, significant and unavoidable aesthetic impacts would remain.

### Agriculture and Forestry Resources

Alternative 2 would preserve nine selected opportunity sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are currently in use with agricultural activities (i.e., Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37) and would replace these sites with other development areas currently zoned for VO. Given that opportunity sites currently zoned for agriculture (Opportunity Sites 1 and 2) would be removed under this alternative, MM-AG-OBJ-1 and MM-AG-CONS-2 would not be required to mitigate impacts on land zoned for agriculture. No impacts would occur to agriculturally zoned sites under this alternative.

While Opportunity Sites 20, 21, and 22 are currently used for agricultural operations, a 74-unit residential project has recently been approved on these sites through a Builder's Remedy application and, therefore, must be assumed for buildout under this alternative. Alternative 2 would substantially reduce the severity of impacts on agricultural uses compared to the project due to the preservation of nine sites that are currently either zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are currently in use with agricultural activities. However, the conversion of existing agricultural uses at Sites 20, 21, and 22 to non-agricultural use would be a potentially significant impact because the land would be permanently removed from the potential for agricultural production. Additionally, while Alternative 2 would preserve nine opportunity sites with agricultural resources, there are an additional seven opportunity sites (i.e., Sites 3, 4, 12, 14, 15, 18, and 50; not including Sites 20, 21, and 22) included in this alternative that are at least partially mapped as Important Farmland (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) by the California Department of Conservation's Farmland Monitoring and Mapping Program. Therefore, impacts on existing agricultural operations and land mapped as Important Farmland would still occur under Alternative 2.

MM-AG-OBJ-3 and MM-AG-CONS-4, which require a Land Evaluation and Site Assessment report to quantitatively evaluate potential impact on agricultural resources for residential developments on opportunity sites with existing agricultural operations or land mapped as Important Farmland, would apply to Alternative 2. If the Land Evaluation and Site Assessment report determines that impacts on agricultural resources would be significant, a Farmland Mitigation Plan would be required as described under MM-AG-OBJ-1 and MM-AG-CONS-2. Additionally, MM-AG-OBJ-5 and MM-AG-CONS-6, which require compliance with agricultural buffer zone requirements, would apply to this alternative.

The only way to fully avoid impacts on agricultural resources would be to eliminate the potential for future development on all opportunity sites that are currently zoned or used for agricultural operations. Given that Alternative 2 would not eliminate impacts associated with buildout of Sites 20, 21, and 22, the impact on agricultural resources, while reduced in severity, would remain significant and unavoidable.

Additionally, development of opportunity sites that could be considered forest land or timberland would result in similar impacts on those described for the project in Section 4.2. As described therein, this impact would be significant because the forest land and timberland would be permanently removed. MM BIO-OBJ-1, MM BIO-CONS-2, and MM-BIO-CONS-5 would partially mitigate for impacts on forest vegetative communities by requiring the identification of sensitive vegetation communities (including forest and woodland vegetation) on each site and implementation of habitat creation, restoration, enhancement, or preservation. As such, although impacts on agriculturally zoned sites and existing agricultural uses would be substantially reduced, Alternative 2 would result in similar impacts on Important Farmland and forestry resources compared to the project. Impacts would remain significant and unavoidable.

### Air Quality

As explained above, buildout of Alternative 2 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites with agricultural resources and replaced in the VO zone. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated mobile emissions. Therefore, impacts would be reduced compared to the project. However, without detailed air quality modeling to estimate projected criteria air pollutant emissions under this alternative, the PEIR conservatively assumes that total daily emissions would not be reduced to below the Monterey Bay Air Resources District emissions thresholds. Impacts related to criteria air pollutant emissions would remain significant and unavoidable, similar to the project.

### Biological Resources

The elimination of nine opportunity sites (i.e., Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37) under Alternative 2 could reduce impacts on sensitive habitats and special-status species. For example, Sites 1 and 19 currently support annual grassland, Site 24 contains freshwater marsh, and Site 37 supports mixed conifer forest. Freshwater marsh and mixed conifer forest are considered sensitive vegetation communities. These sites would be removed under Alternative 2. Therefore, no impacts would occur to vegetation communities and the sensitive species supported at these sites under this alternative. Further, since the replacement housing units would be in areas currently zoned as VO, it is assumed that the majority of these units would be in existing urbanized or developed areas that do not support sensitive biological resources to the same extent as vacant or undeveloped sites. Nevertheless, there are two areas in the VO zoning district that are outside existing urban areas in UMC (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1, Visitor Serving/Professional Office Zones in Unincorporated Monterey County). Given the location of these VO zones in rural, undeveloped areas of UMC, as well as the remaining opportunity sites included in Alternative 2 that support sensitive habitats and biological resources, this alternative could facilitate residential development on sites that support sensitive biological resources, similar

to the project. As such, residential development facilitated under Alternative 2 would impact sensitive habitats and special-status species on several opportunity sites. Similar to the project, implementation of the MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, as well as MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would reduce potential impacts on sensitive biological resources and potential conflicts with adopted local plans, policies, or ordinances for the protection and conservation of biological resources; however, impacts resulting from projects that qualify for streamlining under the Objective Process would remain significant and unavoidable because the County would not be able to condition these projects to reduce environmental effects. Consequently, impacts would be significant and unavoidable, similar to the project.

### Cultural Resources

As described for the project in Section 4.5, Cultural Resources, none of the opportunity sites contain a known historical resource as defined under CEQA Guidelines, Section 15064.5(a), although there are historical resources near the opportunity sites. Some of the opportunity sites, as well as replacement sites in the VO zoning district, may contain structures or resources that are at least 50 years old that could be eligible for inclusion in the California Register of Historical Resources, National Register of Historic Places, or Monterey County Local Register of Historic Resources. As such, implementation of this alternative could potentially cause a substantial adverse change in the significance of a historical resource and result in a potentially significant impact. As described for the project, implementation of MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, and MM-CUL-CONS-4 would minimize the potential for adverse effects to historical (built) resources. Compliance with the Secretary of the Interior's Standards for the Treatments of Historic Properties would mitigate potential impacts to below the level of significance.

Additionally, ground-disturbing activities have the potential to encounter previously unrecorded archaeological resources. Activities such as clearing, trenching, and grading could damage or destroy archaeological resources that may be present on or below the ground surface. Therefore, site-specific analysis would be required to ensure that adequate protection of archaeological resources is provided. Unevaluated cultural resources may require additional research, evaluation, or testing to determine their eligibility for inclusion in the California Register of Historical Resources or the National Register of Historic Places. To reduce the potential for direct impacts from damage and disturbance to significant archaeological resources, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would apply.

As with the project, although ground disturbance associated with the implementation of the project could potentially disturb or destroy Native American human remains, compliance with state law would reduce the potential impacts to a less than significant level. Therefore, impacts would be similar to those described for the project.

### Energy

As discussed above, buildout of Alternative 2 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites with agricultural resources and replaced in the VO zone. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated vehicle fuel use. As such, impacts would be reduced compared to the project, but would still be less than significant.

### Geology and Soils (Paleontological Resources)

As described in Section 4.7, Geology and Soils (Paleontological Resources), the opportunity sites are composed of Holocene- to Miocene-aged deposits, which may include geologic formations capable of yielding paleontological resources. While Alternative 2 would remove selected opportunity sites with agricultural resources, the remaining opportunity sites and replacement sites would also include geologic formations capable of yielding paleontological resources. Therefore, replacement sites under Alternative 2 could disturb potentially significant paleontological resources, similar to the project. Alternative 2 would require a reconnaissance-level paleontological review, and a project-specific paleontological resource monitoring and mitigation plan as needed, submitted to the County as part of the development application package to determine the level of paleontological resource sensitivity and mitigate potential impacts on paleontological resources (MM-GEO-OBJ-1 and MM-GEO-CONS-2). As such, impacts related to paleontological resources under Alternative 2 would be less than significant with mitigation, similar to those for the project.

### Greenhouse Gas Emissions

As discussed above, buildout of Alternative 2 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites with agricultural resources and replaced in the VO zone. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated mobile emissions. Additionally, this alternative would align more closely than the project with the 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategy, for preserving natural and working lands. MM-GHG-OBJ-1 and MM-GHG-CONS-2, which ensure consistency with specific key project attributes from the 2022 Scoping Plan, would apply to this alternative. However, similar to the project, this alternative cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes. This is both because it would result in significant and unavoidable impacts related to agricultural resources (natural and working lands) and VMT and because this alternative would be precluded by Assembly Bill 130 from mandating building decarbonization. Although impacts related to GHG

emissions would be reduced compared to the project for the reasons described above, impacts would remain significant and unavoidable.

### Hazards and Hazardous Materials

Alternative 2 would preserve nine selected opportunity sites (i.e., Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37) and would replace these sites with other development areas currently zoned for VO. Similar to the project, Alternative 2 would enable potential future residential development of lands within 0.25 mile of active hazardous materials sites, including at Opportunity Sites 28, 29, 46, 47, 49, 50, 52, and 64. Given the proximity of these hazardous sites to opportunity sites where future residential development may occur, buildout of these opportunity sites may have the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Additionally, this alternative would facilitate future residential development of lands that have the potential for unknown soil or groundwater contamination that could result in hazardous materials upset. Therefore, implementation of Alternative 2 would result in a potentially significant impact related to release of hazardous materials, similar to the project.

It should be noted that Alternative 2 would preserve nine selected opportunity sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are currently in use with agricultural activities; therefore, this alternative would reduce (but not eliminate) the potential for disturbance of previously undiscovered soil or groundwater contamination due to application of pesticides or other potentially hazardous materials at existing agricultural sites. Similar to the project, Alternative 2 would require the preparation of a project-specific Phase I ESA for opportunity sites that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses (MM-HAZ-OBJ-1 and MM-HAZ-CONS-2). A Phase II ESA and soil sampling may also be required if the need is identified as part of the Phase I ESA (MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6).

Additionally, Alternative 2 would similarly split zone Opportunity Sites 46 and 47 to ensure consistency with airport compatibility requirements. Therefore, Alternative 2 would result in similar impacts related to hazardous materials compared to the project. Impacts would remain less than significant with mitigation.

### Hydrology and Water Quality

As described in Section 4.10, Hydrology and Water Quality, agricultural uses can result in increased erosion and sedimentation, nitrate contamination from irrigation runoff, and seawater intrusion. Alternative 2 would preserve nine sites that are currently zoned for farmland (i.e., F/40), have a Limited Agricultural overlay district, or are currently in use with agricultural activities. Therefore, the agricultural activities at these sites under Alternative 2 could increase erosion and sedimentation, nitrate contamination from irrigation runoff and seawater intrusion.

Additionally, agricultural sites rely heavily on groundwater from wells and generally have a higher water demand per acre than residential uses. Because Alternative 2 would preserve nine sites with agricultural resources, the continued agricultural activities at these sites under Alternative 2 would increase use of groundwater compared to the project, which would convert these sites to HDR.

Similar to the project, this alternative could include construction activities that would loosen and expose soils, otherwise increase the potential for soil erosion and sedimentation, and create new or additional impervious surfaces. Development allowed under Alternative 2 would be required to comply with federal, state, and local regulations for stormwater management, erosion control, site drainage, and flood control (e.g., National Pollutant Discharge Elimination System Construction General Permit, municipal separate storm sewer system permit, Stormwater Pollution Prevention Plan, Monterey County Stormwater Ordinance, Monterey County Erosion Control Ordinance, Post-Construction Stormwater Management Requirements [PCRs]). As such, impacts related to surface and groundwater quality, site drainage and hydrology, and flood hazards would be less than significant, similar to the project.

Given the critical importance of groundwater in UMC, any new development could result in impacts on groundwater recharge and supplies. Implementation of MM-HYD-OBJ-1 and MM-HYD-CONS-2 would occur under this alternative, as described for the project. Therefore, impacts under Alternative 2 would be similar to the project impacts. However, impacts on groundwater recharge and supplies would remain significant and unavoidable.

### Land Use and Planning

Similar to the project, Alternative 2 would not alter connectivity with adjacent areas or physically divide established communities. Future development facilitated by Alternative 2 would continue to be subject to applicable County regulations, objective development standards, environmental review requirements, and mitigation measures identified in this PEIR, as applicable. Similar to the project, future development facilitated by Alternative 2 could, in some instances, not fully conform to certain area, master, or community plan policies or design guidelines. For example, the implementation of this alternative would require the County to revise several Area and Master Plan policies that limit the number of units that be created in the plan area. While amendments to the policies as part of the project would address the project's land use and planning conflicts with those existing policies, the conflicts could result in significant environmental impacts related to groundwater sustainability and water supply (refer to Hydrology and Water Quality; Utilities and Service Systems). Therefore, impacts on land use and planning under Alternative 2 would remain significant and unavoidable, similar to the project.

### Mineral Resources

Potential housing sites throughout the UMC are mapped, fully or partially, in MRZ-2 areas, areas where adequate information indicates that significant mineral resources are either present or likely

to be present. Similarly, some sites are mapped in MRZ-3 areas, in which the significance of mineral resources cannot be evaluated due to limited data. Alternative 2 would not eliminate any opportunity sites mapped as MRZ-2, but would remove several sites mapped as MRZ-3, including Sites 19 and 37. Therefore, this alternative could incrementally reduce the potential for impacts on mineral resources. Replacement sites needed to achieve sufficient housing capacity to meet the RHNA target with a reasonable capacity buffer could also be in areas mapped as MRZ-2 or MRZ-3. However, it is reasonable to assume that the replacement sites would be unlikely to be used for mineral resource production, even without future residential development on the sites, due to their location in existing urbanized areas in the VO zone and incompatible surrounding land uses. Therefore, existing zoning, current on-site and adjacent uses, and ownership of the sites would likely preclude these replacement sites from mineral resource production, similar to the opportunity sites included in the project. Similar to the project, a Statement of Reasons would need to be prepared to eliminate the potential for extraction of the mineral resource(s), in accordance with PRC Sections 2762 and 2763. Therefore, impacts on mineral resources would be less than significant, similar to those described for the project.

### Noise

Buildout of Alternative 2 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites with agricultural resources and replaced in the VO zone. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, which typically consist of a louder ambient noise environment and fewer surrounding noise-sensitive receptors than potential housing sites zoned Farmland or Low Density Residential, such as several of the opportunity sites that would be removed under this alternative. MM-NOI-OBJ-1 and MM-NOI-CONS-2, which require compliance with County noise regulations, and MM-NOI-OBJ-3, which requires preparation of acoustical studies and incorporation of noise reduction measures, would apply to this alternative. Additionally, MM-NOI-OBJ-4 and MM-NOI-CONS-5, which include best management practices to limit groundborne vibration levels during construction at nearby receptors, would apply. Therefore, although Alternative 2 would reduce noise and vibration impacts compared to the project, impacts would still be less than significant with mitigation.

### Public Services

Buildout of Alternative 2 would result in the same number of housing units as the project; therefore, Alternative 2 would result in the same increase in demands on fire protection and emergency services, police protection, schools, and other public facilities in UMC. However, because replacement sites in the VO zone would primary be in Carmel Valley and along SR-68, these areas would be disproportionately impacted by increased demand on public services. Similar to the project, impacts on fire protection services and schools under Alternative 2 would be mitigated through payment of development impact fees for future residential projects (MM-PS-

OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4). In addition, future demand for additional sheriff services as a result of the project would be funded through the County's annual budget review and allocation, as well as various federal or state funds and grants. As such, impacts would be less than significant with mitigation, similar to the project.

### Recreation

Because buildout of Alternative 2 would result in the same number of housing units as the project, Alternative 2 would result in the same increase in demands on recreational facilities. Replacement sites in the VO zone would primary be in Carmel Valley and along SR-68; therefore, these areas would be disproportionately impacted by increased demand on recreational facilities. Similar to the project, impacts on recreational facilities under Alternative 2 would be mitigated through provision of on-site parkland/open space or payment of fair share in-lieu fees for future residential projects (MM-REC-OBJ-1 and MM-REC-CONS-2). As such, impacts would be less than significant with mitigation, similar to the project.

### Transportation

Alternative 2 would not introduce any components or changes to the project that would result in a conflict with a program, plan, ordinance, or policy addressing the circulation system. Alternative 2 would result in less than significant impacts related to multimodal facilities, hazardous design features, and emergency access, as described for the project.

As discussed above, buildout of Alternative 2 would result in the same number of housing units as the project. Therefore, temporary construction-related transportation impacts from worker vehicle trips, and vendor/hauling trips and long-term transportation impacts from operational vehicle trips would be the same under Alternative 2 as described for the project. Since the replacement housing units would be in areas currently zoned as VO, these units would generally be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced VMT. However, if replacement units are placed in the two VO zoning districts in rural, undeveloped areas of southern UMC, Alternative 2 could result in increased VMT compared to the project. Additionally, the majority of areas in the VO zoning district are in Carmel Valley and along SR-68, which are two of the most heavily trafficked areas of UMC. Therefore, replacing opportunity sites in the VO zoning district could exacerbate existing vehicle congestion in these areas. Without comprehensive transportation modeling to estimate projected VMT under this alternative, this PEIR conservatively assumes that VMT would not be reduced to 15 percent below existing average VMT per capita. Therefore, while Alternative 2 would reduce VMT impacts compared to the project due to replacement sites in the VO zone, impacts on VMT would remain significant and unavoidable.

### Tribal Cultural Resources

As described for the project, ground-disturbing activities under Alternative 2 have the potential to encounter previously unrecorded TCRs. Activities such as clearing, trenching, and grading could damage or destroy TCRs that may be present on or below the ground surface. Therefore, site-specific analysis would be required to ensure that adequate protection of TCRs is provided. To reduce the potential for direct impacts from damage and disturbance to significant TCRs, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would apply. Therefore, impacts would be similar to those described for the project.

### Utilities and Service Systems

Similar to the project, Alternative 2 would result in less than significant impacts on new or expanded electric power, natural gas, and telecommunications facilities and solid waste generation. However, Alternative 2 would cause potentially significant impacts related to new or expanded water and wastewater facilities as well as long-term water supply and wastewater treatment capacity. Since the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would already be served by existing utilities infrastructure. However, the majority of areas in the VO zoning district are in Carmel Valley, which includes many sites reliant on septic systems, and along SR-68, an area with notable water supply constraints. Further, there are two areas in the VO zoning district that are outside existing urban areas in UMC (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1). Given the location of these VO zones in rural, undeveloped areas of UMC, there is likely no existing public utilities infrastructure to support residential units at these sites. Therefore, replacing opportunity sites in the VO zoning district could exacerbate existing concerns related to water supply and water and wastewater infrastructure. Because buildout of Alternative 2 would result in the same number of housing units as the project, temporary construction-related water demand and long-term wastewater generation would be the same under Alternative 2 as described for the project. However, given that Alternative 2 would preserve existing agricultural uses which have a higher water demand than residential, long-term operational water demand would be increased compared to the project. Similar to the project, Alternative 2 would include programs or policies that require County coordination with water service providers and suppliers on projects and policies to achieve sub-basin sustainability and water allocations to accommodate future growth. Further, Alternative 2 would include mitigation measures requiring development applicants to prove both adequate long-term water supply and wastewater treatment capacity (MM-UTL-OBJ-1 and MM UTL-CONS-2). Nevertheless, as described in Section 4.18, water supply in Monterey County is heavily constrained. Even with the implementation of mitigation measures and HEU6 programs and policies, impacts related to water supply would remain significant and unavoidable.

### Wildfire

Of the nine opportunity sites that would be removed under Alternative 2 (i.e., Sites 1, 2, 5, 6, 19, 24, 25, 26, and 37), two (Sites 24 and 37) are in very high FHSZs, six (Sites 1, 5, 6, 19, 24, and 37) are in the WUI, and two (Sites 6 and 24) are adjacent to slopes 25 percent or greater. As such, Alternative 2 would incrementally reduce the potential for exposure to risk related to wildfires at these sites. Replacement sites would be in areas currently zoned for VO, which are more likely to be in urban areas farther from very high FHSZs and the WUI. However, the majority of areas in the VO zoning district are in Carmel Valley and along SR-68, two of the most heavily trafficked areas of UMC. The Carmel Valley and SR-68 areas are in Evacuation Regions A, C, and D (refer to Figure 4.19-3), which are the evacuation regions with the highest numbers of new housing units (and associated vehicles), as identified in the Sites Inventory (refer to Table 4.19-5). Therefore, replacing opportunity sites in the VO zoning district would exacerbate existing vehicle congestion and could affect the efficiency of emergency evacuation in these areas. Similar to the project, Alternative 2 would include requirements for evacuation map packets under MM-WF-OBJ-1 and MM-WF-CONS-2 and for evacuation educational materials under MM-WF-OBJ-3 and MM-WF-CONS-4. Similar to the project, compliance with existing codes and regulations related to emergency access and evacuation, as well as the mitigations listed above, would ensure adequate emergency access is provided for new residential development associated with future development. Nevertheless, impacts on emergency response and evacuation under Alternative 2 would be greater compared to the project.

Alternative 2 would also include MM-WF-OBJ-5 and MM-WF-OBJ-6, to ensure that by-right uses comply with the same regulations for fire safety that apply to other projects. Overall, impacts would be increased compared to the project but less than significant with mitigation.

### Cumulative Impacts

The contribution of Alternative 2 to cumulatively considerable impacts would be greater than the project's contribution to transportation hazards, emergency access, and evacuation due to the concentration of replacement sites in the VO zoning district areas in Carmel Valley and along SR-68, two areas adversely affected by existing vehicle traffic and congestion. Alternative 2 would also increase cumulative impacts on existing public utilities infrastructure due to the reliance on septic systems in Carmel Valley, the water supply constraints along SR-68, and the lack of existing public utilities infrastructure to support residential units at the two VO zoning districts in rural, undeveloped areas of southern UMC. Given that Alternative 2 would preserve existing agricultural uses which have a higher water demand than residential, Alternative 2's contribution to cumulative operational water demand would be increased compared to the project. Cumulative impacts on air quality, energy, GHG emissions, and VMT under Alternative 2 would be slightly reduced compared to the project because the replacement sites in the VO zone would generally be closer

to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced VMT (and associated criteria air pollutant and GHG emissions, as well as vehicle fuel use).

#### 6.2.2.2 Conclusion and Relationship to Project Objectives

Given that Alternative 2 would provide the same number of housing units and implement the same HEU6 programs as the project, this alternative would meet the project objectives to facilitate development of new units and preserve existing housing for residents at all income levels (Objective 2); provide a range of housing opportunities as near as possible to jobs, transit, services, and schools (Objective 4); provide adequate buffer with additional RHNA units (Objective 5); and provide CEQA streamlining for housing development (Objective 7). Alterative 2 would also update applicable County plans and regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan and LCP into conformance with state housing law (Objective 6). Alternative 2 would not meet the housing needs of all economic segments of community members who live in UMC areas in a manner that affirmatively furthers fair housing (Objective 3) to the same extent as the project because 1,153 replacement housing units would all be in the VO zoning district, which is composed of areas concentrated in Carmel Valley and along SR-68. Additionally, because Alternative 2 would require the County to revise the Sites Inventory and submit a revised Housing Element to CA HCD for approval, this alternative does not include a compliant Housing Element (Objective 1) as the project does. Revising the Sites Inventory and Housing Element would push the County further out from their goal of adopting a compliant Housing Element during the Sixth Cycle (2023–2031) planning period.

### 6.2.3 Alternative 3: Water Conservation Alternative

There are four groundwater basins in Monterey County identified by the California Department of Water Resources (DWR) as high priority: Corralitos – Pajaro Valley, Salinas Valley – 180/400 Foot, Salinas Valley – East Side, and Salinas Valley – Langley Area aquifers.[9] Further, the Salinas Valley – 180/400 Foot, and Corralitos – Pajaro Valley aquifers are identified by DWR as critically over-drafted.[10] This alternative would remove specific sites in groundwater basins identified as high priority (prioritizing removal of sites in critically over-drafted basins) to reduce significant and unavoidable direct impacts on groundwater recharge and supplies, as described in Section 4.10, and significant and unavoidable cumulative impacts on future water supply as described in Section 4.18.

Opportunity sites that are overlying aquifers identified as critically over-drafted in Monterey County (i.e., Salinas Valley – 180/400 Foot Aquifer, and Corralitos – Pajaro Valley) include Sites 5, 6, 11, 12, 13, 14, 15, 25, 26, 27, 28, 29, 30, 41, 48, 49, 50, 51, and 64. However, it should be noted that

[9] Basin Prioritization is a technical process that uses the best available data and information to classify California's groundwater basins into one of four categories (i.e., high-, medium-, low-, or very low-priority) based on several factors (DWR 2025a).

[10] Overdraft occurs where the average annual amount of groundwater extraction exceeds the long-term average annual supply of water to the basin. As defined by the Sustainable Groundwater Management Act (SGMA), "A basin is subject to critical overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts" (DWR 2025b).

Sites 12 and 13 are in the Castroville Community Plan area and were suggested for inclusion in the project by CA HCD staff; therefore, these sites are assumed for buildout under this alternative. The remainder of sites in critically over-drafted groundwater basins, totaling 464 units, would be eliminated under the Water Conservation Alternative (Alternative 3), reducing significant and unavoidable direct and cumulative impacts on groundwater recharge and future water supply.

To maintain a buffer of 15 percent of units in each income category as recommended by CA HCD, this alternative would need to replace a total of 97 units in the extremely low/very low income category. All other income categories would have sufficient units to maintain the 15 percent buffer above the RHNA; however, additional housing units in the other income categories would realistically be included with the extremely low/very low income units in replacement housing projects for developers to gain a return on their investment. Therefore, CA HCD requires the Sites Inventory to include assumptions for RHNA distribution among all income categories, rather than assuming developments in the extremely low/very low income category only. To avoid speculating on the number of units needed in other income categories to replace 97 units in the extremely low/very low income category, this alternative includes replacement of the 464 total units that would be removed due to elimination of Sites 5, 6, 11, 14, 15, 25, 26, 27, 28, 29, 30, 41, 48, 49, 50, 51, and 64 (Figure 6-3, Alternative 3: Water Conservation Alternative).

This would be accomplished by rezoning some of the UMC areas that are currently zoned as VO and located outside the high priority groundwater basins to HDR/25 or HDR/30. The areas proposed for this zoning change would be focused in more urban areas that have a higher likelihood of existing utilities and public infrastructure in place. Areas of UMC currently zoned as VO are primarily located along SR-68 and the Carmel River. As such, intensifying development in these areas could result in impacts and concerns related to infrastructure (e.g., water and sewer) constraints, vehicle traffic/congestion, and Affirmatively Furthering Fair Housing considerations. Additionally, VO zoned areas are likely to already be developed with existing uses, and CA HCD limits the percentage of already developed sites that can be included in the Sites Inventory. However, the areas proposed for this zoning change would be focused in more urban areas that have a higher likelihood of existing utilities and public infrastructure in place at or near the VO zoned sites. This would allow the County to both provide more housing in areas already planned for development and to avoid development on sites overlying critically over-drafted groundwater basins.

The entire acreage of VO zoning districts would not be buildable due to slope, environmental constraints, and other factors; however, there would be more than enough capacity to replace enough units to maintain the 15 percent buffer. For instance, there are currently 387.8 acres of VO zoning districts in UMC and 386.6 acres of VO zoning districts outside the high priority and critically over-drafted groundwater basins. If all 386.6 acres were replaced with HDR/25 zoning, this would provide capacity for 9,665 units, well above the 464 units needed to replace the sites removed under Alternative 3. Therefore, to meet the 15 percent buffer for each income category

as recommended by CA HCD, this alternative would need to rezone a smaller percentage of the total acreage of VO zoning districts in UMC as HDR/25 or HDR/30.

Alternative 3 would reduce the severity of impacts on groundwater recharge and associated supply due to the removal of 464 units from areas in critically over-drafted groundwater basins. However, given that this alternative would still result in new development (associated with buildout of Sites 12 and 13) in critically over-drafted groundwater basins, the management of which extends beyond the County's jurisdiction, groundwater impacts would remain significant and unavoidable, as discussed further below.

#### 6.2.3.1 Impact Analysis

### Aesthetics

Of the 17 opportunity sites that would be eliminated under Alternative 3, none are currently either wholly or partially in special visual zoning overlays. As such, this alternative would not reduce impacts on aesthetics compared to the project because the same number of visually sensitive sites would be rezoned, and the existing Design Control (D), Site Plan Review (S), and Visual Sensitivity (VS) zoning overlays would be removed from these sites, rendering the protective provisions of County Code Chapters 20.44, 21.44, and 20.46 inapplicable to future development on these parcels.

Additionally, sites in VO zoning districts are likely to already be developed and/or focused in more urban areas of UMC; therefore, replacement sites in these areas could be considered less visually sensitive. However, the VO zoning districts are predominantly located within Carmel Valley and along State Route 68, which are considered visually sensitive areas (refer to Figure 4.1-2b and Figure 4.1-2c, Visual Sensitivity Areas). Additionally, State Route 68 is a designated State Scenic Highway. By replacing units removed under Alternative 3 with sites in the VO zones, this Alternative could increase impacts to scenic vistas, scenic resources within a State Scenic Highway, and visual character or quality associated with buildout of residential units within Carmel Valley and along State Route 68. Similarly, buildout of replacement units in the two areas of the VO zoning district outside existing urban areas (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1, Visitor Serving/Professional Office Zones in Unincorporated Monterey County) could increase impacts to scenic vistas and visual character or quality associated with residential development on rural, undeveloped land.

As described for the project, proposed future development would be required to comply with the amended zoning code for HDR/25 or HDR/30, and go through project-level staff review during the application process for compatibility with surrounding visual resources by using appropriate siting, design, materials, and landscaping. Also, if the opportunity sites under Alternative 3 have the potential to result in adverse impacts on visual resources, MM-AES-OBJ-1, MM-AES-OBJ-2, and MM-AES-CONS-3 would be incorporated to reduce visual impacts and ensure compatibility with surrounding environment through ODS, tree removal standards, site and building design,

building materials, colors, landscaping, and grading, building height, massing, setback, and orientation. MM-AES-OBJ-4 and MM-AES-CONS-5 would require fencing or screening material around active construction areas to reduce visual impacts by obstructing direct public views of construction activities. MM-AES-OBJ-6 would require that new development apply exterior lighting design standards to reduce potential lighting and glare impacts.

However, as described for the proposed project, specific impacts on particular scenic vistas and visual resources are unknown and would be speculative to analyze without project-specific details and fully developed ODS for each area plan, master plan, land use plan, and community plan areas. Therefore, significant and unavoidable aesthetic impacts would remain.

### Agriculture and Forestry Resources

Alternative 3 would remove opportunity sites in aquifers identified as critically over-drafted, including Sites 5, 6, 11, 14, 15, 25, 26, 27, 28, 29, 30, 41, 48, 49, 50, 51, and 64. Several of these sites, including, Sites 5, 14, 15, 25, 26, and 50, are mapped as Important Farmland. Additionally, Sites 5 and 6 are currently zoned MDR/4-A-UR with the Limited Agricultural overlay district, and Sites 25 and 26 are currently used for agricultural operations. Therefore, implementation of Alternative 3 would preserve seven sites that are either mapped as Important Farmland, are currently zoned with the Limited Agricultural overlay, or are used for agricultural operations. Therefore, this alternative would decrease the severity of impacts on agricultural resources compared to the project. Furthermore, since Alternative 3 would remove several sites in critically over-drafted groundwater basins, existing and future agricultural uses on these sites in these groundwater basins would continue to rely on groundwater wells for more sustainable groundwater management than under the project.

Although Alternative 3 would reduce impacts on agricultural resources compared to the project, implementation of Alternative 3 would rezone opportunity sites to HDR/25 or HDR/30. Consequently, future residential development projects at these sites would not trigger the requirement in County Code Chapter 21.92 for a Farmland Mitigation Plan. MM-AG-OBJ-1 and MM-AG-CONS-2 would reduce potential impacts on agricultural uses by protecting other existing agricultural operations in the UMC. However, the Farmland Mitigation Plan required for MM-AG-OBJ-1 and MM-AG-CONS-2 would provide only partial mitigation for the impact on existing agricultural operations because the mitigation would not replace these existing agricultural uses elsewhere in the UMC. MM-AG-OBJ-3 and MM-AG-CONS-4 would apply to this alternative too. These mitigation measures require a Land Evaluation and Site Assessment report to quantitatively evaluate the potential impacts of residential development on opportunity sites with existing agricultural operations or land mapped as Important Farmland. Additionally, MM-AG-OBJ-5 and MM-AG-CONS-6, which require compliance with agricultural buffer zone requirements, would apply this alternative.

The only way to fully avoid impacts on Important Farmland and agricultural resources would be to eliminate all opportunity sites on land designated as Important Farmland or currently zoned or used for agriculture from future development. Given that Alternative 3 would not eliminate all impacts on Important Farmland, agricultural uses, and agriculturally zoned sites, the impact on agricultural resources, while reduced in severity, would remain significant and unavoidable.

Additionally, development of opportunity sites that could be considered forest land or timberland would result in similar impacts to those described for the project in Section 4.2. As described therein, this impact would be significant because the forest land and timberland would be permanently removed. MM BIO-OBJ-1, MM BIO-CONS-2, and MM-BIO-CONS-5 would partially mitigate for impacts on forest vegetative communities by requiring the identification of sensitive vegetation communities (including forest and woodland vegetation) on each site and implementation of habitat creation, restoration, enhancement, or preservation. As such, although impacts on Important Farmland would be substantially reduced, Alternative 3 would result in similar impacts to existing agricultural uses and forestry resources compared to the project. Impacts would remain significant and unavoidable.

### Air Quality

As discussed above, buildout of Alternative 3 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites in critically over-drafted groundwater basins and replaced in the VO zone outside high priority groundwater basins. Because the replacement housing units would be in areas currently zoned as VO, these units would generally be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated mobile emissions. Therefore, impacts would be slightly reduced compared to the project. However, without detailed air quality modeling to estimate projected criteria air pollutant emissions under this alternative, the PEIR conservatively assumes that total daily emissions would not be reduced to below the Monterey Bay Air Resources District emissions thresholds because a finding of no impact cannot be made without evidence. As such, impacts related to criteria air pollutant emissions would remain significant and unavoidable, similar to the project.

### Biological Resources

The elimination of 17 opportunity sites under Alternative 3 could reduce impacts on sensitive habitats and special-status species. For example, Sites 11, 14, and 15 include freshwater and annual grassland. Site 48 supports oak woodland and annual grassland. Freshwater and oak woodland are sensitive vegetation communities. These sites would be removed under Alternative 3. Therefore, no impacts would occur to vegetation communities and the sensitive species supported at these sites under this alternative. Further, since the replacement housing units would be in areas currently zoned as VO, it is assumed that the majority of these units would be in existing urbanized or developed areas that do not support sensitive biological resources to the same extent as vacant or undeveloped

sites. Nevertheless, there are two areas in the VO zoning district that are outside existing urban areas in UMC (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1). Given the location of these VO zones in rural, undeveloped areas of UMC, as well as the remaining opportunity sites included in Alternative 2 that support sensitive habitats and biological resources, this alternative could facilitate residential development in opportunity sites that support sensitive biological resources, similar to the project. As such, residential development facilitated under Alternative 2 would impact sensitive habitats and special-status species on several opportunity sites. Similar to the project, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, as well as MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would reduce potential impacts on sensitive biological resources and potential conflicts with adopted local plans, policies, or ordinances for the protection and conservation of biological resources; however, impacts resulting from projects that qualify for streamlining under the Objective Process would remain significant and unavoidable because the County would not be able to condition these projects for environmental concerns. Impacts would be significant and unavoidable, similar to the project.

### Cultural Resources

As described for the project in Section 4.5, none of the opportunity sites under this alternative contain a known historical resource as defined under CEQA Guidelines, Section 15064.5(a), although there are historical resources near the opportunity sites. Some of the opportunity sites, as well as replacement sites in the VO zoning district, may contain structures or resources that are at least 50 years old that could be eligible for inclusion in the California Register of Historical Resources, National Register of Historic Places, or Monterey County Local Register of Historic Resources. As such, implementation of this alternative could potentially cause a substantial adverse change in the significance of a historical resource and result in a potentially significant impact. As described for the project, implementation of MM-CUL-OBJ-1, MM-CUL-CONS-2, MM-CUL-OBJ-3, and MM-CUL-CONS-4 would minimize the potential for adverse effects to historical (built) resources. Compliance with the Secretary of the Interior's Standards for the Treatments of Historic Properties would mitigate potential impacts to below the level of significance.

Additionally, ground-disturbing activities have the potential to encounter previously unrecorded archaeological resources. Activities such as clearing, trenching, and grading could damage or destroy archaeological resources that may be present on or below the ground surface. Therefore, site-specific analysis would be required to ensure that adequate protection of archaeological resources is provided. Unevaluated cultural resources may require additional research, evaluation, or testing to determine their eligibility for inclusion in the California Register of Historical Resources or the National Register of Historic Places. To reduce the potential for direct impacts

from damage and disturbance to significant archaeological resources, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would apply.

As described for the project, although ground disturbance associated with the implementation of the project could have the potential to disturb or destroy Native American human remains, the required compliance with state law would reduce the potential impacts to a less than significant level. Therefore, impacts would be similar to those described for the project.

### Energy

As discussed above, buildout of Alternative 3 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites in critically over-drafted groundwater basins and replaced in the VO zone outside high priority groundwater basins. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated vehicle fuel use. As such, impacts would be slightly reduced compared to the project, but would still be less than significant.

### Geology and Soils (Paleontological Resources)

As described in Section 4.7, the opportunity sites are composed of Holocene- to Miocene-aged deposits, which may include geologic formations capable of yielding paleontological resources. While Alternative 3 would remove selected opportunity sites in critically over-drafted groundwater basins, the remaining opportunity sites and replacement sites would also include geologic formations capable of yielding paleontological resources. Therefore, replacement sites under Alternative 3 could disturb potentially significant paleontological resources, similar to the project. Alternative 3 would require a reconnaissance-level paleontological review, and a project-specific paleontological resource monitoring and mitigation plan as needed, submitted to the County as part of the development application package to determine the level of paleontological resource sensitivity and mitigate potential impacts on paleontological resources (MM-GEO-OBJ-1 and MM-GEO-CONS-2). As such, impacts related to paleontological resources under Alternative 3 would be less than significant with mitigation, similar to those described for the project.

### Greenhouse Gas Emissions

As discussed above, buildout of Alternative 3 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites in critically over-drafted groundwater basins and replaced in the VO zone outside high priority groundwater basins. Because the replacement housing units would be in areas currently zoned as VO, these units would likely be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced associated mobile emissions. MM-GHG-OBJ-1 and MM-GHG-CONS-2, which ensure consistency with specific key project attributes from the 2022 Scoping Plan, would apply to this

alternative. However, similar to the project, this Alternative cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D, Priority GHG Reduction Strategies, and key project attributes because it would result in significant and unavoidable impacts on agricultural resources (natural and working lands) and VMT, and is precluded by Assembly Bill 130 from mandating building decarbonization. Although impacts related to GHG emissions would be reduced compared to the project for the reasons described above, impacts would remain significant and unavoidable.

### Hazards and Hazardous Materials

Alternative 3 would remove several opportunity sites that are in critically over-drafted groundwater basins, including several opportunity sites within 0.25 mile of active hazardous materials sites, including at Opportunity Sites 28, 29, 49, 50, and 64. Therefore, this alternative would reduce (but not eliminate) the potential for disturbance of previously undiscovered soil or groundwater contamination due to proximity to active hazardous materials sites. Similar to the project, Alternative 3 would still enable potential future residential development of lands within 0.25 mile of active hazardous materials sites, including Sites 46, 47, and 52. Given the proximity of these hazardous sites to opportunity sites where future residential development may occur, buildout of these opportunity sites may have the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Additionally, this alternative would facilitate future residential development of lands that have the potential for unknown soil or groundwater contamination that could result in hazardous materials upset. Therefore, implementation of Alternative 3 would result in a potentially significant impact related to release of hazardous materials, similar to the project.

It should be noted that Alternative 3 would preserve four opportunity sites that currently either have a Limited Agricultural overlay district (Sites 5 and 6) or are used for agricultural activities (Sites 25 and 26); therefore, this alternative would reduce (but not eliminate) the potential for disturbance of previously undiscovered soil or groundwater contamination due to application of pesticides or other potentially hazardous materials at existing agricultural sites.

Similar to the project, Alternative 3 would require the preparation of a project-specific Phase I ESA for opportunity sites that are either within 0.25 mile of a listed hazardous site or have historically supported or currently support industrial or agricultural uses (MM-HAZ-OBJ-1 and MM-HAZ-CONS-2). A Phase II ESA and soil sampling may also be required if the need is identified as part of the Phase I ESA (MM-HAZ-OBJ-3, MM-HAZ-CONS-4, MM-HAZ-OBJ-5, and MM-HAZ-CONS-6).

Additionally, Alternative 3 would similarly split zone Opportunity Sites 46 and 47 to ensure consistency with airport compatibility requirements. Therefore, Alternative 3 would result in

similar impacts related to hazardous materials compared to the project. Impacts would remain less than significant with mitigation.

### Hydrology and Water Quality

Similar to the project, Alternative 3 could include construction activities that would loosen and expose soils, otherwise increase the potential for soil erosion and sedimentation, and create new or additional impervious surfaces. Similar to the project, development allowed under Alternative 3 would be required to comply with federal, state, and local regulations for stormwater management, erosion control, site drainage, and flood control (e.g., National Pollutant Discharge Elimination System Construction General Permit, municipal separate storm sewer system permit, Stormwater Pollution Prevention Plan, Monterey County Stormwater Ordinance, Monterey County Erosion Control Ordinance, Post-Construction Stormwater Management Requirements [PCRs]). As such, impacts related to surface and groundwater quality, site drainage and hydrology, and flood hazards would be less than significant, similar to the project.

Alternative 3 would remove specific sites in groundwater basins identified as critically over-drafted and would replace these sites with other development areas currently zoned for VO and located outside high priority groundwater basins. Specifically, Alternative 3 would remove 17 sites from the Salinas Valley – 180/400 Foot, and Corralitos – Pajaro Valley aquifers. Therefore, Alternative 3 would reduce the severity of impacts on groundwater recharge and future water supply compared to the project. However, given that Sites 12 and 13 are in the Castroville Community Plan area and were suggested for inclusion in the project by CA HCD staff, Alternative 3 would not remove all opportunity sites from critically over-drafted groundwater basins, and impacts would remain significant and unavoidable. Additional sites in other high priority groundwater basins in Monterey County (i.e., Salinas Valley – East Side, and Salinas Valley – Langley Area aquifers) would be built out under this Alternative to maintain enough housing capacity to meet the state-mandated RHNA. Given the critical importance of groundwater in UMC, any new development could result in impacts on groundwater recharge and supplies. Implementation of MM-HYD-OBJ-1 and MM-HYD-CONS-2 would require preparation of groundwater recharge/hydrology analyses for all developments in Sustainable Groundwater Management Act-designated high priority (critically over-drafted) groundwater basins, high priority groundwater basins, or the adjudicated Seaside Groundwater Basin, as described for the project. Therefore, impacts would be similar to but slightly reduced compared to the project. However, impacts on groundwater recharge and supplies would remain significant and unavoidable.

### Land Use and Planning

Similar to the project, Alternative 3 would not alter connectivity with adjacent areas or physically divide established communities. Future development facilitated by Alternative 3 would continue to be subject to applicable County regulations, objective development standards, environmental review

requirements, and mitigation measures identified in this PEIR, as applicable. Similar to the project, future development facilitated by Alternative 3 could, in some instances, not fully conform to certain area, master, or community plan policies or design guidelines. For example, the implementation of this alternative would require the County to revise several Area and Master Plan policies that limit the number of units that be created in the plan area. While amendments to the policies as part of the project would address the project's land use and planning conflicts with those existing policies, the conflicts could result in significant environmental impacts related to groundwater sustainability and water supply (refer to Hydrology and Water Quality; Utilities and Service Systems). Therefore, impacts on land use and planning under Alternative 3 would be significant and unavoidable, similar to the project.

### Mineral Resources

As described for the project, potential housing sites throughout the UMC are mapped fully or partially in MRZ-2, which denotes areas where adequate information indicates that significant mineral resources are present or likely to be present, and MRZ-3, which represents areas where the significance of mineral resources cannot be evaluated due to limited data. Alternative 3 would not eliminate any opportunity sites mapped as MRZ-2 or MRZ-3. Further, replacement sites needed to achieve sufficient housing capacity to meet the RHNA target with a reasonable capacity buffer could also be in areas mapped as MRZ-2 or MRZ-3. However, it reasonable to assume that the replacement sites would be unlikely to be used for mineral resource production, even without future residential development on the sites, due to their location in existing urbanized areas in the VO zone and incompatible surrounding land uses. Therefore, existing zoning, current on-site and adjacent uses, and ownership of the sites would likely preclude these replacement sites from mineral resource production, similar to the opportunity sites included in the project. Similar to the project, a Statement of Reasons would need to be prepared to eliminate the potential for extraction of the mineral resource(s), in accordance with PRC Sections 2762 and 2763. Therefore, impacts on mineral resources would be less than significant, similar to those described for the project.

### Noise

As discussed above, buildout of Alternative 3 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites in critically over-drafted groundwater basins and replaced in the VO zone outside high priority groundwater basins. Because the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be closer to jobs and other commercial uses, which typically consist of a louder ambient noise environment and fewer surrounding noise-sensitive receptors compared to other more rural areas of UMC. MM-NOI-OBJ-1 and MM-NOI-CONS-2, which require compliance with County noise regulations, and MM-NOI-OBJ-3, which requires preparation of acoustical studies and incorporation of noise reduction measures, would apply to this alternative. Additionally, MM-NOI-OBJ-4 and MM-NOI-CONS-5, which include best management practices to limit groundborne vibration levels during construction at nearby receptors, would apply. Therefore, although

Alternative 3 would reduce noise and vibration impacts compared to the project, impacts would still be less than significant with mitigation.

### Public Services

Buildout of Alternative 3 would result in the same number of housing units as the project; therefore, Alternative 3 would result in the same increase in demands on fire protection and emergency services, police protection, schools, and other public facilities in UMC. However, because replacement sites in the VO zone would primary be in Carmel Valley and along SR-68, these areas would be disproportionately impacted by increased demand on public services. Similar to the project, impacts on fire protection services and schools under Alternative 3 would be mitigated through payment of development impact fees for future residential projects (MM-PS-OBJ-1, MM-PS-CONS-2, MM-PS-OBJ-3, and MM-PS-CONS-4). In addition, future demand for additional sheriff services as a result of the project would be funded through the County's annual budget review and allocation, as well as various federal or state funds and grants. As such, impacts would be less than significant with mitigation, similar to the project.

### Recreation

Because buildout of Alternative 3 would result in the same number of housing units as the project, Alternative 3 would result in the same increase in demands on recreational facilities. Replacement sites in the VO zone would primary be in Carmel Valley and along SR-68; therefore, these areas would be disproportionately impacted by increased demand on recreational facilities. Similar to the project, impacts on recreational facilities under Alternative 2 would be mitigated through provision of on-site parkland/open space or payment of fair share in-lieu fees for future residential projects (MM-REC-OBJ-1 and MM-REC-CONS-2). As such, impacts would be less than significant with mitigation, similar to the project.

### Transportation

Alternative 3 would not introduce any components or changes to the project that would conflict with a program, plan, ordinance, or policy addressing the circulation system. Additionally, Alternative 3 would result in less than significant impacts related to multimodal facilities, hazardous design features, and emergency access, as described for the project.

As discussed above, buildout of Alternative 3 would result in the same number of housing units as the project, although a portion of the housing units would be removed from sites in critically over-drafted groundwater basins and replaced in the VO zone outside high priority groundwater basins. Therefore, temporary construction-related transportation impacts from worker vehicle trips and vendor/hauling trips and long-term transportation impacts from operational vehicle trips would be the same under Alternative 3 as described for the project. Since the replacement housing units would be in areas currently zoned as VO, these units would likely be closer to jobs and other commercial

uses, resulting in fewer or shorter vehicle trips and reduced VMT. However, if replacement units are placed in the two VO zoning districts in rural, undeveloped areas of southern UMC, Alternative 3 could result in increased VMT compared to the project. Additionally, the majority of areas in the VO zoning district are in Carmel Valley and along SR-68, which are two of the most heavily trafficked areas of UMC. Therefore, replacing opportunity sites in the VO zoning district could exacerbate existing vehicle congestion in these areas. Without comprehensive transportation modeling to estimate projected VMT under this alternative, this PEIR conservatively assumes that VMT would not be reduced to 15 percent below existing average VMT per capita. Therefore, while Alternative 3 would substantially reduce VMT impacts compared to the project due to the reduction in scale of development, impacts on VMT would remain significant and unavoidable.

### Tribal Cultural Resources

As described for the project, ground-disturbing activities under Alternative 3 have the potential to encounter previously unrecorded TCRs. Activities such as clearing, trenching, and grading could damage or destroy TCRs that may be present on or below the ground surface. Therefore, site-specific analysis would be required to ensure that adequate protection of TCRs is provided. To reduce the potential for direct impacts from damage and disturbance to significant TCRs, MM-CUL-OBJ-5, MM-CUL-CONS-6, MM-CUL-OBJ-7, and MM-CUL-CONS-8 would apply. Therefore, impacts would be similar to those described for the project.

### Utilities and Service Systems

Similar to the project, Alternative 3 would result in less than significant impacts on new or expanded electric power, natural gas, and telecommunications facilities and solid waste generation. However, potentially significant impacts related to new or expanded water and wastewater facilities as well as long-term water supply and wastewater treatment capacity would occur. Since the replacement housing units would be in areas currently zoned as VO, it is assumed that these units would be in areas already served with existing utilities infrastructure. However, the majority of areas in the VO zoning district are in Carmel Valley, which includes many sites reliant on septic systems, and along SR-68, an area with notable water supply constraints. Further, there are two areas in the VO zoning district that are outside existing urban areas in UMC (one is west of Greenfield and the other is southeast of King City, as shown on Figure 6-1). Given the location of these VO zones in rural, undeveloped areas of UMC, there is likely no existing public utilities infrastructure to support residential units at these sites. Therefore, replacing opportunity sites in the VO zoning district could exacerbate existing concerns related to water supply and wastewater infrastructure. Because buildout of Alternative 3 is assumed to result in the same number of housing units as the project, temporary construction-related water demand and long-term operational water demand and wastewater generation would be the same under Alternative 3 as described for the project.

Similar to the project, Alternative 3 would include programs or policies that require County coordination with water service providers and suppliers on projects and policies to achieve sub-basin sustainability and water allocations to accommodate future growth. Further, Alternative 2 would include mitigation measures requiring development applications to include evidence of adequate long-term water supply and wastewater treatment capacity (MM-UTL-OBJ-1 and MM UTL-CONS-2). Nevertheless, as described in Section 4.18, water supply in Monterey County is heavily constrained. Even with the implementation of mitigation measures and HEU6 programs and policies, impacts related to water supply would remain significant and unavoidable.

### Wildfire

Of the 17 opportunity sites that would be removed under Alternative 3 (i.e., Sites 5, 6, 11, 14, 15, 25, 26, 27, 28, 29, 30, 41, 48, 49, 50, 51, and 64), one (Site 48) is in a very high FHSZ, nine (Sites 5, 6, 11, 14, 15, 30, 41, 48, and 64) are in the WUI, and six (Sites 6, 14, 15, 25, 48, and 64) are in or adjacent to slopes 25 percent or greater. Since Alternative 3 would remove several sites in these areas with potentially higher fire risk, this alternative would incrementally reduce the potential for exposure to wildfire risk. Replacement sites would be in areas currently zoned for VO, which are more likely to be in urban areas farther from very high FHSZs and the WUI. However, the majority of areas in the VO zoning district are in Carmel Valley and along SR-68, two of the most heavily trafficked areas of UMC. The Carmel Valley and SR-68 areas are in Evacuation Regions A, C, and D (refer to Figure 4.19-3), which are the evacuation regions with the highest numbers of new housing units (and associated vehicles), as identified in the Sites Inventory (refer to Table 4.19-5). Therefore, replacing opportunity sites in the VO zoning district would exacerbate existing vehicle congestion and could affect the efficiency of emergency evacuation in these areas. Alternative 3 would include requirements for both evacuation map packets under MM-WF-OBJ-1 and MM-WF-CONS-2 and for evacuation education materials under MM-WF-OBJ-3 and MM-WF-CONS-4, as described for the project. Similar to the project, compliance with existing codes and regulations related to emergency access and evacuation, as well as the mitigations listed above, would ensure adequate emergency access is provided for new residential development associated with future development. Nevertheless, impacts on emergency response and evacuation under Alternative 3 would be greater compared to the project.

Additionally, Alternative 3 would include MMWF-OBJ-5 and MM-WF-OBJ-6, which would ensure that by-right uses comply with the same regulations for fire safety that apply to all other projects. Overall, impacts would be increased compared to the project but still less than significant with mitigation.

### Cumulative Impacts

The contribution of Alternative 3 to cumulatively considerable impacts would be greater than the project's contribution to transportation hazards, emergency access, and evacuation due to the

concentration of replacement sites in the VO zoning district areas in Carmel Valley and along SR-68, two areas adversely affected by existing vehicle traffic and congestion. Alternative 3 would also increase cumulative impacts on existing public utilities infrastructure due to the reliance on septic systems in Carmel Valley, the water supply constraints along SR-68, and the lack of existing public utilities infrastructure to support residential units at the two VO zoning districts in rural, undeveloped areas of southern UMC. However, Alternative 3 would substantially reduce the cumulative impact on groundwater basins compared to the project by removing the majority of opportunity sites from critically over-drafted groundwater basins and replacing these units outside high priority groundwater basins in UMC. Cumulative impacts on air quality, energy, GHG emissions, and VMT under Alternative 3 would be slightly reduced compared to the project because the replacement sites in the VO zone would generally be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced VMT (and associated criteria air pollutant and GHG emissions, as well as vehicle fuel use).

#### 6.2.3.2 Conclusion and Relationship to Project Objectives

Given that Alternative 3 would provide the same number of housing units and implement the same HEU6 programs as the project, this alternative would meet the project objectives to facilitate development of new units and preserve existing housing for residents at all income levels (Objective 2); provide a range of housing opportunities as near as possible to jobs, transit, services, and schools (Objective 4); provide adequate buffer with additional RHNA units (Objective 5); and provide CEQA streamlining for housing development (Objective 7). Alterative 2 would also update applicable County plans and regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan and LCP into conformance with state housing law (Objective 6). Similar to Alternative 2, Alternative 3 would not meet the housing needs of all economic segments of community members who live in UMC areas in a manner that affirmatively furthers fair housing (Objective 3) to the same extent as the project because 464 replacement housing units would all be in the VO zoning district, which is composed of areas concentrated in Carmel Valley and along SR-68. Additionally, because Alternative 3 would require the County to revise the Sites Inventory and submit a revised Housing Element to CA HCD for approval, this alternative does not include a compliant Housing Element (Objective 1) as the project does. Revising the Sites Inventory and Housing Element would push the County further out from their goal of adopting a compliant Housing Element during the Sixth Cycle (2023–2031) planning period.

## 6.3 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires that a lead agency, together with its alternatives analysis, identify an environmentally superior alternative among those evaluated in the EIR. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. The lead agency is not, however, obligated to select the environmentally superior alternative for implementation if it would either not accomplish the basic

project objectives or is infeasible (Section 15126.6[a], [c], and [f] of the CEQA Guidelines). In many cases, the No Project Alternative would have the fewest or least intense impacts. However, Section 15126.6(e)(2) of the CEQA Guidelines states that when the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

Selection of the environmentally superior alternative may be difficult for a planning and policy document such as the HEU6, especially when the differences between the impacts of the alternatives involve trade-offs between types of impacts. An alternative may reduce environmental impacts on certain resource areas and increase impacts on other resource areas compared to the project, while another alternative may reduce different environmental impacts. Although CEQA does not provide specific guidance in this matter, where an alternative is anticipated to result in reduced impacts for the majority of resource areas or substantially reduced impacts in especially critical resource areas, this can support a finding that the alternative is environmentally superior. In such instances, the PEIR may disclose the differences between the alternatives and identify how each alternative may be superior. Table 6-1, Comparison of Potentially Significant Impacts for Alternatives to the Project, provides a summary comparison of the alternatives with the project to highlight if each alternative would result in a similar, greater, or lesser impact regarding potentially significant impacts. This assessment considers the overall advantages and disadvantages associated with the alternatives analyzed relative to the project. In evaluating alternatives under CEQA, different weights may be assigned to the relative importance of specific environmental impacts. In comparing the alternatives to the project, "more weight" was given to agricultural resources, biological resources, land use and planning, groundwater basins, water supply, transportation, water and wastewater infrastructure, and evacuation/wildfire hazards than to other resource area impacts, primarily considering the importance of these issue areas to have the most significant and irreversible impacts and the County's overall policy context for the management of these resources.

In addition to the comparison of impacts assessed in Table 6-1, consideration must be given to how and to what extent each of the alternatives accomplishes the purpose and objectives of the project (refer to Section 6.2.2.2 and Section 6.2.3.2). Table 6-2, Ability of Project Alternative to Meet the Project Objectives, provides a summary comparison of the alternatives with the project to determine if each alternative would meet the project objectives.

As shown in Table 6-2, the No Project Alternative would not accomplish any of the project objectives. Under the No Project Alternative, the HEU6 would not be implemented by the County. This alternative would continue to allow new residential development under the County's 2010 General Plan and existing zoning regulations. However, without implementation of a compliant Housing Element that meets the state-required RHNA and provides housing policies and programs to facilitate development of new units, the No Project Alternative would not meet any of the project objectives, as shown in Table 6-2. This alternative would not bring the 2010 General Plan or

Zoning Ordinance (Inland and Coastal) into conformance with state housing law and would severely constrain the County's ability to encourage development of lower-income housing. Further, the No Project Alternative would not provide CEQA streamlining for housing development consistent with the HEU6, LCP, 2010 General Plan, Zoning Ordinance (Inland and Coastal), and other applicable County regulations.

While the No Project Alternative would reduce impacts to a greater degree than all other alternatives, it is not likely to be a feasible alternative for the County due to the repercussions the County would face without an adopted, compliant Housing Element. As described in Section 6.2.1, if CA HCD determines that a Housing Element fails to substantially comply with the state's Housing Element Law, its General Plan is at risk of being deemed inadequate, and therefore invalid. Local governments with noncompliant housing elements are vulnerable to litigation from housing rights' organizations, developers, and CA HCD. Potential consequences of lawsuits include mandatory compliance, suspension of local control on building matters, and court approval of housing developments. Therefore, while the No Project Alternative would substantially reduce impacts on many of the resource areas analyzed in this PEIR, the No Project Alternative is not the environmentally superior alternative.

Alternative 3, the Water Conservation Alternative, has been selected as the environmentally superior alternative. Alternative 3 would replace only 464 units in the VO zoning district compared to 1,153 units under Alternative 2. As such, Alternative 3 would have reduced impacts compared to Alternative 2 related to concentrating replacement sites in Carmel Valley and along SR-68, including impacts on aesthetics, transportation hazards, emergency access, evacuation, and utilities infrastructure. For instance, due to the visual sensitivity of Carmel Valley and along State Route 68, which comprise the majority of the VO zoning districts, replacement units in these areas could increase impacts to scenic vistas and visual character and quality. In addition, due to the reliance of septic systems in Carmel Valley, the water supply constraints along SR-68, and the lack of existing public utilities infrastructure to support residential units at the two VO zoning districts in rural, undeveloped areas of southern UMC, the concentration of replacement sites in the VO zone could exacerbate existing impacts and constraints related to water and wastewater infrastructure. Alternative 3 would have a smaller impact on these communities that have VO zoning districts because it would involve placing less than half of the replacement sites under Alternative 2 in these areas.

Alternative 2 would maintain operational water demand by preserving agricultural operations in UMC, which have a higher water demand than residential uses. On the other hand, Alternative 3 would reduce strain on the critically overdraft and high priority groundwater basins in UMC by removing the majority of sites in critically over-drafted basins and replacing them in areas outside high priority basins. Therefore, Alternative 3 would result in reduced impacts on groundwater supplies, conflict with a sustainable groundwater management plan, and water supply availability.

Similar to Alternative 2, Alternative 3 may reduce impacts on air quality, energy, GHG emissions, and VMT compared to the project because the replacement sites in the VO zone would generally be closer to jobs and other commercial uses, resulting in fewer or shorter vehicle trips and reduced VMT (and associated criteria air pollutant and GHG emissions, as well as vehicle fuel use). Given the smaller number of replacement units needed under Alternative 3, this alternative may not reduce impacts on these resource areas to the same extent as Alternative 2. However, it should be noted that replacing sites in the VO zoning district could also increase impacts on air quality, energy, and GHG emissions if concentrated in Carmel Valley and along SR-68 due to the existing vehicle traffic and congestion in these areas. Additionally, if replacement units are placed in the two VO zoning districts in rural, undeveloped areas of southern UMC, both Alternative 2 and Alternative 3 could result in increased VMT compared to the project.

When taken together and compared against the other alternatives considered for analysis, Alternative 3, the Water Conservation Alternative, makes the most sizable reduction in physical environmental impacts and, therefore, would be the environmentally superior alternative to the project.

**Table 6-1. Comparison of Potentially Significant Impacts for Alternatives to the Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.1, Aesthetics** | | | | | |
| Threshold 1: Scenic Vistas | PS | SU | Greater | Greater | Greater |
| Threshold 2: Scenic Resources Within a Scenic Highway | PS | SU | Greater | Greater | Greater |
| Threshold 3: Visual Character or Quality | PS | SU | Greater | Greater | Greater |
| Threshold 4: Light or Glare | PS | LS | Similar | Similar | Similar |
| **Section 4.2, Agriculture and Forestry Resources** | | | | | |
| Threshold 1: Conversion of Farmland to Non-Agricultural Use | PS | SU | Greater | Less | Similar |
| Threshold 2: Conflict with Zoning for Agricultural Use or Williamson Act Contract | PS | SU | Greater | Less | Similar |
| Threshold 3: Conflict with Zoning for Forest or Timberland | PS | SU | Greater | Similar | Similar |
| Threshold 4: Loss or Conversion of Forest Land to Non-Forest Use | PS | SU | Greater | Similar | Similar |
| Threshold 5: Other Changes Resulting in Conversion of Farmland or Forest Land | NI | NI | Greater | Similar | Similar |
| **Section 4.3, Air Quality** | | | | | |
| Threshold 1: Consistency with Applicable Air Quality Plan | PS | SU | Less | Similar | Similar |
| Threshold 2: Cumulative Increase in Criteria Pollutant Emissions | PS | SU | Less | Less | Less |
| Threshold 3: Sensitive Receptors | LS | LS | Less | Similar | Similar |
| Threshold 4: Odors | LS | LS | Less | Similar | Similar |

**Table 6-1. Comparison of Potentially Significant Impacts for Alternatives to the Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.4, Biological Resources** | | | | | |
| Threshold 1: Candidate, Sensitive, or Special Status Species | PS | SU | Less | Similar | Similar |
| Threshold 2: Riparian Habitat and Other Sensitive Natural Communities | PS | SU | Less | Similar | Similar |
| Threshold 3: State or Federally Protected Wetlands | PS | LS | Less | Similar | Similar |
| Threshold 4: Wildlife Corridors and Wildlife Nursery Sites | PS | SU | Less | Similar | Similar |
| Threshold 5: Local Policies or Ordinances Protecting Biological Resources | PS | SU | Less | Similar | Similar |
| Threshold 6: Habitat Conservation Plans and Natural Community Conservation Plans | NI | NI | Less | Similar | Similar |
| **Section 4.5, Cultural Resources** | | | | | |
| Threshold 1: Historical Resources | PS | LS | Similar | Similar | Similar |
| Threshold 2: Archaeological Resources | PS | LS | Similar | Similar | Similar |
| Threshold 3: Human Remains | LS | LS | Similar | Similar | Similar |
| **Section 4.6, Energy** | | | | | |
| Threshold 1: Wasteful or Inefficient Energy Usage | LS | LS | Less | Less | Less |
| Threshold 2: Conflict with Renewable or Energy Efficiency Plan | LS | LS | Less | Less | Less |
| **Section 4.7, Geology and Soils (Paleontological Resources)** | | | | | |
| Threshold 1: Exposure to Seismic-Related Hazards | LS | LS | Similar | Similar | Less |
| Threshold 2: Soil Erosion or Topsoil Loss | LS | LS | Similar | Similar | Similar |
| Threshold 3: Geologic Stability | LS | LS | Similar | Similar | Similar |
| Threshold 4: Expansive Soils | LS | LS | Similar | Similar | Similar |
| Threshold 5: Septic Tanks or Alternative Wastewater Disposal Systems | LS | LS | Similar | Similar | Similar |

**Table 6-1. Comparison of Potentially Significant Impacts for Alternatives to the Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| Threshold 6: Paleontological Resources | PS | LS | Similar | Similar | Similar |
| **Section 4.8, Greenhouse Gas Emissions** | | | | | |
| Threshold 1: Generation of Greenhouse Gas Emissions | PS | SU | Less | Less | Less |
| Threshold 2: Conflict with Applicable Plan | PS | SU | Less | Less | Less |
| **Section 4.9, Hazards and Hazardous Materials** | | | | | |
| Threshold 1: Routine Transport, Use, or Disposal of Hazardous Materials | LS | LS | Similar | Similar | Similar |
| Threshold 2: Release of Hazardous Materials | PS | LS | Similar | Similar | Similar |
| Threshold 3: Proximity to Schools | LS | LS | Similar | Similar | Similar |
| Threshold 4: Hazardous Materials Sites | PS | LS | Similar | Similar | Similar |
| Threshold 5: Airport Land Use Compatibility | LS | LS | Similar | Similar | Similar |
| Threshold 6: Emergency Response or Evacuation Plans | PS | LS | Less | Similar | Similar |
| Threshold 7: Wildland Fires | PS | LS | Similar | Similar | Similar |
| **Section 4.10, Hydrology and Water Quality** | | | | | |
| Threshold 1: Water Quality Standards | LS | LS | Similar | Similar | Similar |
| Threshold 2: Groundwater Recharge and Supplies | PS | SU | Less | Greater | Less |
| Threshold 3: Site Drainage and Hydrology | LS | LS | Similar | Similar | Similar |
| Threshold 4: Activities in Flood Hazard, Tsunami, or Seiche Zone | LS | LS | Similar | Similar | Similar |
| Threshold 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan | PS | SU | Less | Greater | Less |
| **Section 4.11, Land Use and Planning** | | | | | |
| Threshold 1: Physical Division of Established Community | LS | LS | Similar | Similar | Similar |
| Threshold 2: Conflict with Applicable Land Use Plans, Policies, and Regulations | PS | SU | Greater | Similar | Similar |

**Table 6-1. Comparison of Potentially Significant Impacts for Alternatives to the Project**

| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| **Section 4.12, Mineral Resources** | | | | | |
| Threshold 1: Loss of Known Mineral Resources | LS | LS | Similar | Similar | Similar |
| Threshold 2: Loss of Locally Important Mineral Resource Site | LS | LS | Similar | Similar | Similar |
| **Section 4.13, Noise** | | | | | |
| Threshold 1: Excessive Noise Levels | PS | LS | Less | Less | Less |
| Threshold 2: Excessive Groundborne Vibration | PS | LS | Less | Less | Less |
| Threshold 3: Aircraft Noise | LS | LS | Less | Similar | Similar |
| **Section 4.14, Public Services** | | | | | |
| Threshold 1: Physical Impacts from the Provision of Public Services Facilities to Maintain Performance Standards | PS | LS | Less | Similar | Similar |
| **Section 4.15, Recreation** | | | | | |
| Threshold 1: Deterioration of Existing Recreational Facilities | PS | LS | Less | Similar | Similar |
| Threshold 2: New or Expanded Recreational Facilities | PS | LS | Less | Similar | Similar |
| **Section 4.16, Transportation** | | | | | |
| Threshold 1: Circulation System Performance | LS | LS | Similar | Similar | Similar |
| Threshold 2: Induction of Substantial Vehicle Miles Traveled | PS | SU | Less | Less | Less |
| Threshold 3: Hazardous Design Features | LS | LS | Similar | Similar | Similar |
| Threshold 4: Inadequate Emergency Access | LS | LS | Similar | Greater | Greater |
| **Section 4.17, Tribal Cultural Resources** | | | | | |
| Threshold 1: Tribal Cultural Resources | PS | LS | Less | Similar | Similar |
| **Section 4.18, Utilities and Service Systems** | | | | | |
| Threshold 1: New or Expanded Utilities Facilities | PS | SU | Less | Similar | Similar |
| Threshold 2: Water Supply Availability | PS | SU | Less | Greater | Less |

**Table 6-1. Comparison of Potentially Significant Impacts for Alternatives to the Project**

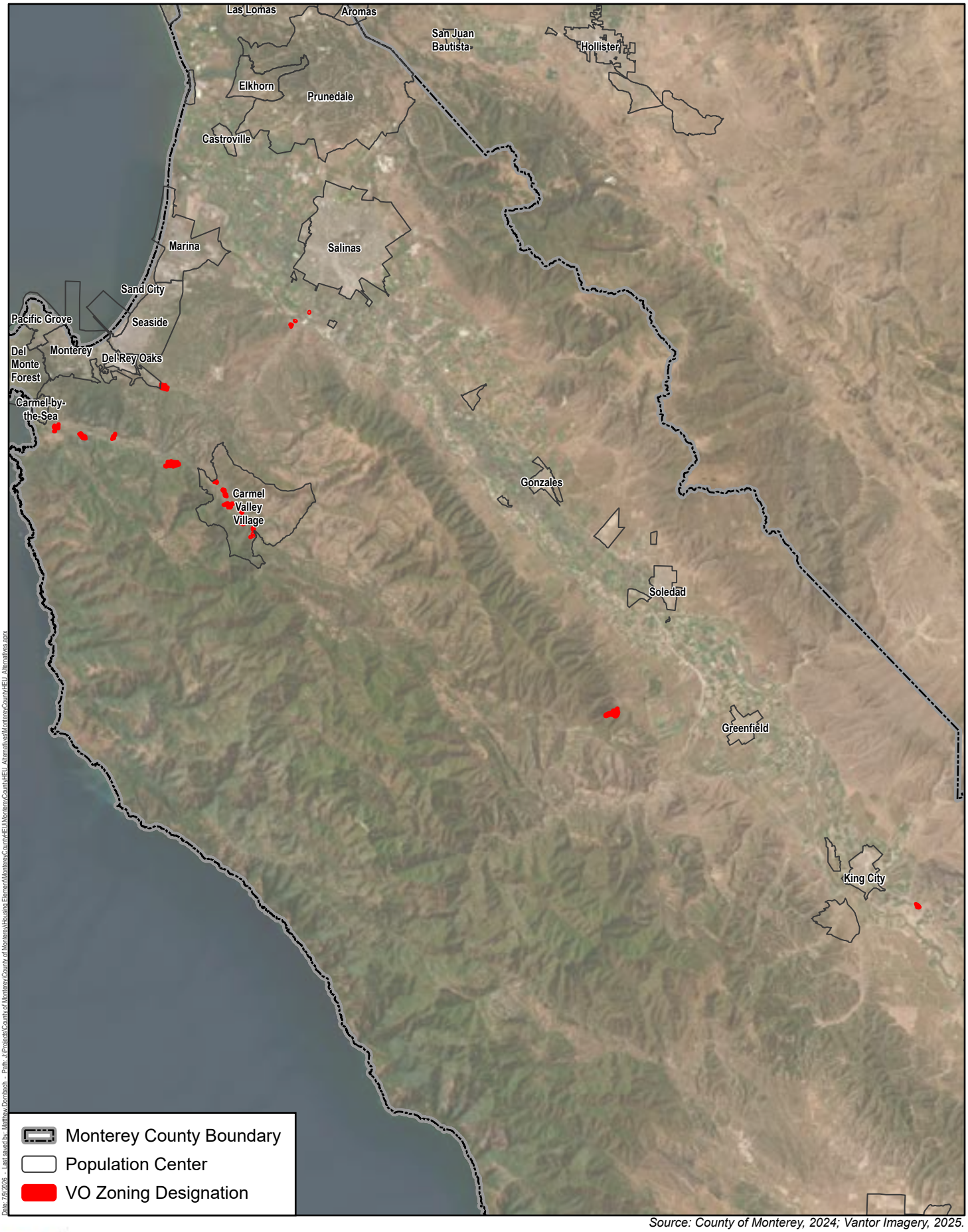
| Impact | Project | | Alternatives | | |
|---|---|---|---|---|---|
| | Without Mitigation | With Mitigation | No Project | Alterative 2 | Alternative 3 |
| Threshold 3: Wastewater Treatment Capacity | PS | SU | Less | Similar | Similar |
| Threshold 4: Solid Waste Generation | LS | LS | Less | Similar | Similar |
| Threshold 5: Compliance with Solid Waste Regulations | LS | LS | Less | Similar | Similar |
| **Section 4.19, Wildfire** | | | | | |
| Threshold 1: Emergency Response or Evacuation Plans | PS | LS | Less | Greater | Greater |
| Threshold 2: Pollutant Concentrations | PS | LS | Similar | Similar | Similar |
| Threshold 3: Installation or Maintenance of Associated Infrastructure | PS | LS | Similar | Similar | Similar |
| Threshold 4: Flooding or Landslides | LS | LS | Similar | Similar | Similar |
| Threshold 5: Risk of Loss, Injury, or Death | PS | LS | Similar | Similar | Similar |

**Notes:** NI = No Impact; LS = Less than Significant Impact; LSM = Less than Significant Impact with Mitigation; SU = Significant and Unavoidable

**Table 6-2. Ability of Project Alternative to Meet the Project Objectives**

| Project Objectives | Ability of Alternatives to Meet the Project Objectives | | |
|---|---|---|---|
| | No Project | Alterative 2 | Alternative 3 |
| 1. Prepare a compliant Housing Element that meets the state-required RHNA for the HEU6 throughout the planning period of 2023 to 2031 while balancing economic, environmental, and social concerns. | No | Partially | Partially |
| 2. Develop housing policies and programs to facilitate development of new units and preserve existing housing for residents at all income levels to address factors contributing to the statewide housing shortage. | No | Yes | Yes |
| 3. Meet the housing needs of all economic segments of community members who live in the UMC areas in a manner that affirmatively furthers fair housing and supports the overall goal of providing safe and decent housing. | No | Partially | Partially |
| 4. Provide a range of housing opportunities as near as possible to jobs, transit, services, and schools. | No | Yes | Yes |
| 5. Provide adequate buffer with additional RHNA units to comply with the purpose of Senate Bill 166 (No Net Loss Law) and ensure implementation of the HEU6. | No | Yes | Yes |
| 6. Update the 2010 General Plan, LCP, Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations to implement the goals, policies, and objectives of the HEU6 and bring the 2010 General Plan, LCP, and County Code into conformance with state housing law. | No | Yes | Yes |
| 7. Provide CEQA streamlining for housing development consistent with the HEU6, 2010 General Plan, LCP, and County Code. | No | Yes | Yes |

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*Source: County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

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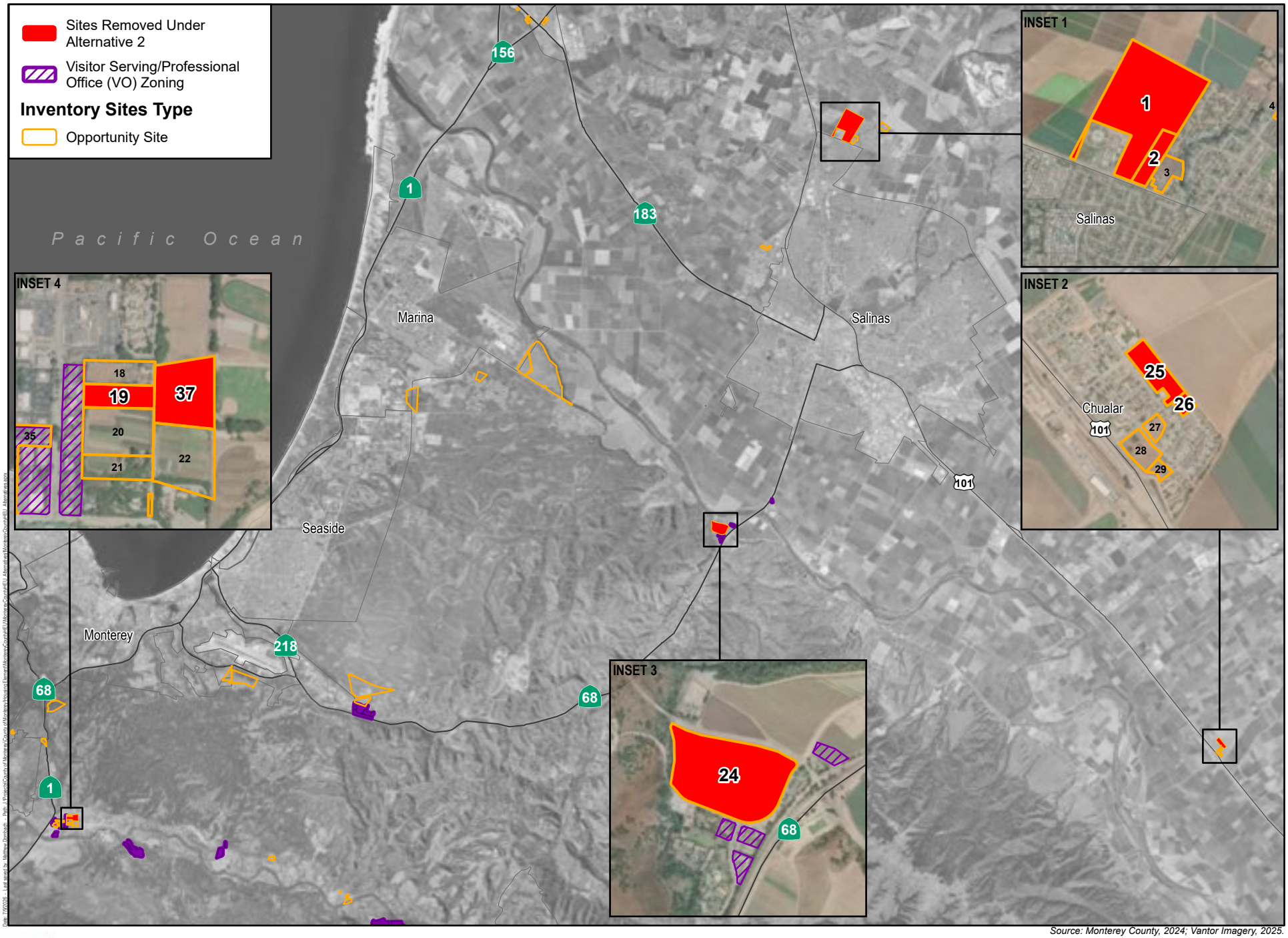
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**Figure 6-1**

Visitor Serving/Professional Office Zones in Unincorporated Monterey County

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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Source: Monterey County, 2024; Vantor Imagery, 2025.

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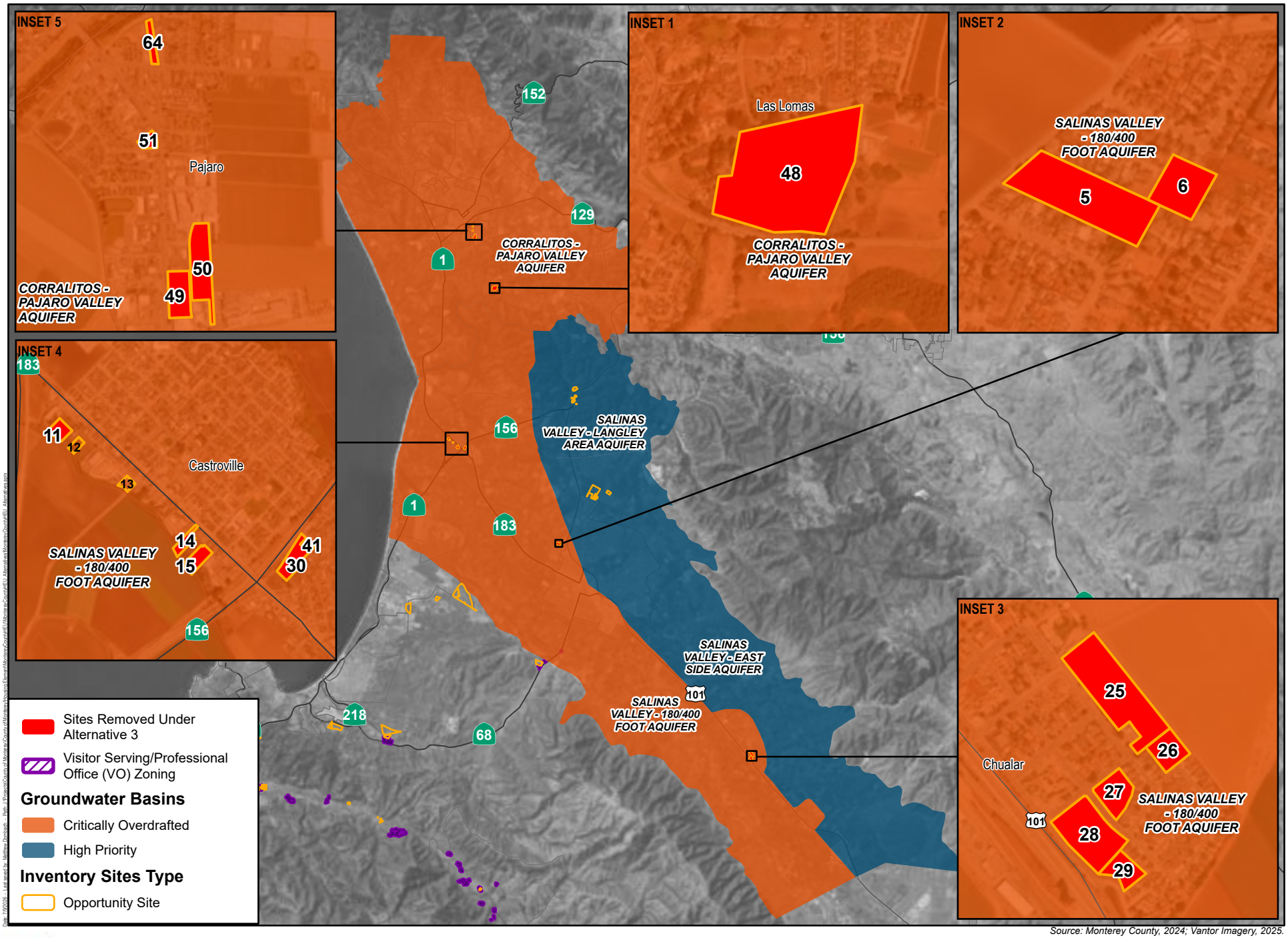
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**Figure 6-2**

Alternative 2: Agricultural Preservation Alternative

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: Monterey County, 2024; Vantor Imagery, 2025.*

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**Figure 6-3**

Alternative 3: Water Conservation Alternative

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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# Chapter 7 Effects Found Not to Be Significant

The California Environmental Quality Act (CEQA) provides that an Environmental Impact Report (EIR) shall focus on the significant effects on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. The environmental topics concluded to be clearly insignificant and unlikely to occur need not be discussed further in an EIR unless information inconsistent with this finding is subsequently received.

CEQA Guidelines, Section 15128, and California Public Resources Code, Section 21100(c), require that an EIR contain a brief statement disclosing the reasons why various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the Program EIR (PEIR; California Public Resources Code, Section 21000 et seq.).

Note that "HEU6" refers to the draft HEU6 document circulated for public review and submitted to the County's Housing and Community Development (County HCD) Department, while "the project" refers to HEU6 along with other components and related actions intended to implement HEU6, as described in Chapter 3, Project Description. HEU6 includes a total of 56 opportunity sites: Opportunity Sites 1 through 6, 8 through 56, and 64.

For the purposes of the Program Environmental Impact Report (PEIR), the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

Based on review concepts identified in the CEQA Guidelines, the County determined that the project would not result in potentially significant impacts related to some or all of the CEQA Guidelines Appendix G Environmental Checklist questions as they relate to the following environmental resources:

- Geology and Soils
- Population and Housing

In substantial conformance with CEQA Guidelines Appendix G, each environmental topic below answers the CEQA Environmental Checklist questions used to determine why the project's impacts were found not to be significant. Impacts found not to be significant include those determined to be "less than significant" or to have "no impact."

## 7.1 Geology and Soils

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on geology and soils if it would:

**a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.**

**Less than Significant Impact.** Monterey County lies in a region of high seismic activity in the form of frequent medium earthquakes with nearby epicenters, as well as infrequent major earthquakes. The Salinas Valley, although underlain by granite, contains several thousand feet of sediment that has a greater seismic hazard. The San Andreas Fault runs through the southeastern portion of Monterey County for approximately 30 miles and poses the single greatest seismic hazard to Monterey County. Two other active faults affecting Monterey County include the Palo Colorado-San Gregorio Fault Zone and the Monterey Bay Fault Zone. The Palo Colorado-San Gregorio Fault Zone connects the Palo Colorado Fault near Point Sur, south of Monterey, with the San Gregorio Fault near Point Año Nuevo in Santa Cruz County. The Monterey Bay Fault lies seaward of the City of Seaside, extending northwesterly to the Pacific Ocean.

The project involves construction of residential units to accommodate future population growth in Monterey County. A few opportunity sites are on or adjacent to mapped earthquake faults, including Opportunity Sites 16, 24, 40, 55, and 57 (Figure 7-1a through Figure 7-1i, Earthquake Faults). With the increase in residential units accommodated by HEU6 and associated residents in Monterey County, the project would increase exposure to earthquake fault rupture. However, compliance with federal, state, and local requirements would reduce impacts related to earthquake fault rupture. For example, Section 21.66.040 of the Monterey County Code (County Code) requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into project design. All future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the applicable area or master plan for which the development project is in (e.g., all development projects in the Fort Ord Master Plan Area need to comply with seismic and geologic hazards policies established in the Fort Ord Master Plan). Similarly, all future development in the Coastal Zone would be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is located, pursuant to Section 20.66.040 of the County Code. Further, all

structures in UMC, including the residential units accommodated by the proposed HEU6, are required to be designed in accordance with the latest edition of the California Building Code. As a result, the final design of project-related improvements would be required to comply with the requirements of the applicable provisions of the California Building Code in effect at the time of building permit issuance. Similarly, Chapter 16.08, Grading, of the County Code sets rules and regulations to control grading, including excavations, earthwork, road construction, fills, and embankments; establishes the administration procedure for issuance of permits; and provides for approval of plans and inspections of grading construction. The County Grading Ordinance generally regulates grading activities that involve more than 100 cubic yards of excavation and fill. An excavation which does not exceed 100 cubic yards, and which is less than 2 feet in depth, or which does not create a cut slope greater than 5 feet in height and steeper, is exempt from grading regulations. Pursuant to the Monterey County Grading Ordinance, no grading permit shall be issued in any case where the Building Official determines that the grading proposed by the applicant will be hazardous by reason of geological hazard, seismic hazard, or unstable soils, among other hazards. The Monterey County Grading Ordinance requires a soil engineering report and engineering geology report (Section 16.08.110: Permit – Soil Engineering and Engineering Geology Reports [Ordinance 4029, 1999; Ordinance 2534, Section 110, 1979]), unless waived by the Building Official because information of record is available showing such data is not needed. The soil engineering report shall include data regarding the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures when necessary, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading. The engineering geology report shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading. Both of these plans are required to be approved by the Building Official in accordance with the County Grading Ordinance. Additionally, the design of project-related improvements would also be required to comply with the recommendations included in the soils engineering and engineering geology reports, which are required to be incorporated into the grading plans and specifications. Therefore, with compliance with all federal, state, and local requirements, project impacts related to exposure to earthquake fault rupture would be less than significant.

**ii. Strong seismic ground shaking.**

**Less than Significant Impact.** Refer to Section 7.1(a)(i). To ensure the structural integrity of all buildings and structures, the project must conform to the seismic requirements as outlined in the California Building Code. Section 21.66.040 of the County Code requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into

the project design. All future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the applicable area or master plan for which the development project is located (e.g., all development projects in the Fort Ord Master Plan Area need to comply with seismic and geologic hazards policies established in the Fort Ord Master Plan). Similarly, all future development in the Coastal Zone would be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is, pursuant to Section 20.66.040 of the County Code. The Monterey County Grading Ordinance requires a soil engineering report and engineering geology report (Section 16.08.110: Permit – Soil Engineering and Engineering Geology Reports [Ordinance 4029, 1999; Ordinance 2534, Section 110, 1979]) to be approved before the issuance of a building permit. The project grading also must conform to the grading requirements outlined in Chapter 16.08 of the County Code and may be inspected by the Building Official prior to the completion of grading activities. Therefore, compliance with the California Building Code, Monterey County Grading Ordinance, and soil engineering report and engineering geology report recommendations would ensure the project would not result in a potentially significant impact from the exposure of people or structures to potential adverse effects from strong seismic ground shaking.

#### iii. Seismic-related ground failure, including liquefaction.

**Less than Significant Impact.** Liquefaction typically occurs when a site is in a zone with seismic activity, on-site soils are cohesionless (such as sand or gravel), groundwater is encountered within 50 feet of the surface, and soil relative densities are less than about 70 percent. Nearly half of the opportunity sites and pipeline sites are within or partially within areas identified by the Federal Emergency Management Agency (FEMA) as having high liquefaction susceptibility, including Opportunity Sites 3, 11 through 15, 17, 21, 24, 40, 42, 45, 48, 51, 54 through 56, 58 through 60, and 62 through 64 (Figure 7-2a through Figure 7-2i, Liquefaction Susceptibility).

Development resulting from the project has the potential to occur in places or in a manner that would result in the exposure of development and future residents to seismic-related ground failure, including liquefaction. However, numerous state and local regulations exist that would apply to all future development resulting from the HEU6, which adequately address these hazards. For instance, all development would be subject to compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations, among others, to reduce or prevent impacts associated with seismic-related ground failure. For instance, pursuant to Section 16.08.110 of the County Code, applicants for a proposed use triggering the need for a grading or building permit for site improvements would be required to prepare and submit a soil engineering report and engineering geology report for review and approval by the County Building Official. The soil engineering report shall include data regarding the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures when necessary, and opinions and

recommendations covering the adequacy of sites to be developed by the proposed grading. The engineering geology report shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading. Recommendations included in the reports and approved by the Building Official are required to be incorporated in the grading plans and specifications. Section 21.66.040 of the County Code similarly requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into the project design. All future development in the Coastal Zone would also be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is located, pursuant to Section 20.66.040 of the County Code. All future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the applicable area or master plan for which the development project is located. The project does not include any plans, policies, or programs that would modify these existing regulations or exempt future residential development from mandatory compliance with these requirements. Therefore, the implementation of the project would have less than significant impacts related to seismic-related ground failure, including liquefaction.

**iv. Landslides.**

**Less than Significant Impact.** Landslide-prone areas are generally defined by steep slopes, weak or fractured bedrock, and heavy moisture. Portions of UMC are mapped as susceptible to landslides, including portions of the Carmel Valley Master Plan Area, Central Salinas Valley Plan Area, the Greater Monterey Peninsula Plan Area, and the Toro Plan Area. None of the opportunity sites are within or even partially within areas identified by FEMA as having high landslide susceptibility (Figure 7-3a through Figure 7-3i, Landslide Susceptibility). However, several opportunity sites are in areas mapped as having moderate landslide susceptibility and could result in a moderate potential to increase exposure of future residents to risk from landslides.

Numerous state and local regulations would apply to all future development resulting from the HEU6, which adequately address this hazard. For instance, all development would be subject to compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations, among others, to reduce or prevent impacts associated with landslides. Pursuant to Section 16.08.110 of the County Code, applicants for a proposed use triggering the need for a grading or building permit for site improvements would be required to prepare and submit a soil engineering report and engineering geology report for review and approval by the County Building Official. Recommendations included in the reports are required to be incorporated into the grading plans

and specifications. Section 21.66.040 of the County Code similarly requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into the project design.

In addition, Policy OS-3.5(b) of the Monterey County General Plan (2010 General Plan) requires development on slopes greater than 25 percent to incorporate adequate special erosion control and construction techniques into project design, which would reduce the potential for landslide hazards. Furthermore, all future development in the Coastal Zone would also be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is located, pursuant to Section 20.66.040 of the County Code. All future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the 2010 General Plan or applicable area or master plan for which the development project is located. The project does not include any plans, policies, or programs that would modify these existing regulations or exempt future residential development from mandatory compliance with these code requirements. Therefore, the implementation of the project would have less than significant impacts related to landslides.

**b. Result in substantial soil erosion or the loss of topsoil.**

**Less than Significant Impact.** Construction of residential units accommodated by the proposed HEU6 could result in substantial soil erosion or the loss of topsoil. Development of individual projects would likely require grading to facilitate the construction of project-related infrastructure. As a result, site preparation and construction activities would disturb soil and increase its susceptibility to erosion. Removal of soils by wind or water can undermine buildings, roads, and other development and contribute to the siltation of local streams or water bodies. Erosion impacts can result from both short-term construction activities and long-term operational conditions where vegetative cover is not re-established following development. The removal and disturbance of soil during grading activities would directly affect the rate of erosion. All ground-disturbing activities would be subject to Monterey County erosion control requirements, including re-planting of disturbed areas, watering, and other physical erosion control methods. For example, Chapter 16.12, Erosion Control, of the County Code sets forth required provisions for project planning, preparation of erosion control plans, runoff control, land clearing, and winter operations, and establishes procedures for administering those provisions. This chapter (and Policy OS-3.5[b] of the 2010 General Plan) requires that specific design considerations be incorporated into projects to reduce the potential of erosion and that an Erosion Control Plan be approved by the County prior to initiation of grading activities. Therefore, prior to the issuance of any grading permit for individual projects, project applicants would be required to prepare and submit an Erosion Control Plan and standard construction best management practices to minimize temporary increases in

erosion during construction consistent with the requirements of County Code, Chapters 16.08 and 16.12. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the National Pollutant Discharge Elimination System Construction General Permit provisions. Compliance with the National Pollutant Discharge Elimination System Construction General Permit would trigger preparation and compliance with an approved Stormwater Pollution Prevention Plan that would consider the full range of erosion control best management practices. Therefore, in addition to the Erosion Control Plan, project applicants would be required to prepare and submit a Stormwater Pollution Prevention Plan in accordance with Regional Water Quality Control Board standards. The Erosion Control Plan and Stormwater Pollution Prevention Plan would be required to incorporate best management practices consistent with the requirements of the National Pollutant Discharge Elimination System and County Code, Section 16.12.80, Land Clearing, to ensure that contaminated runoff and sediment are minimized during site preparation, construction, and post-construction periods. Individual project applicants would be required to submit the Erosion Control Plan and a copy of the approved Stormwater Pollution Prevention Plan, including the Waste Discharge Identification Number, to County HCD – Environmental Services for review and approval prior to the issuance of any grading permit.

All future development projects in the inland planning areas would be required to comply with applicable erosion control policies established in the applicable area or master plan for which the development project is located. Further, all future development in the Coastal Zone would also be required to comply with applicable erosion control policies established in the applicable Land Use Plan and associated Coastal Implementation Plan for which the development project is located. For instance, the North County Land Use Plan includes Land Disturbance Target requirements to control erosion and sedimentation to estuarine systems. The North County Coastal Implementation Plan requires a Land Disturbance Target Evaluation and a determination as to whether development is in a Watershed Restoration area for all proposed development in the North County Land Use Plan Area before the application can be determined complete.

Compliance with County Code requirements and the National Pollutant Discharge Elimination System Construction General Permit would ensure that potential construction-related erosion is minimized and that standard best management practices would be implemented during construction. Furthermore, as discussed in Section 7.1(a)(i), individual project applicants would be required to submit detailed project-level grading plans to the County consistent with County Code, Section 16.08.100. Moreover, as noted above, all future development would be required to comply with the recommendations of site-specific soils engineering and engineering geology reports. Therefore, with compliance with all federal, state, and local requirements, project impacts related to erosion or loss of topsoil would be less than significant.

**c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.**

**Less than Significant Impact.** Development resulting from the project has the potential to occur in places or in a manner that would be exposed to hazards due to soil instability. However, numerous state and local regulations exist that would apply to all future development resulting from the HEU6, which adequately address this hazard. For instance, all development would be subject to compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations, among others, to reduce or prevent impacts associated with soil instability. Pursuant to Section 16.08.110 of the County Code, applicants for a proposed use triggering the need for a grading or building permit for site improvements would be required to prepare and submit a soil engineering report and engineering geology report for review and approval by the County Building Official. Recommendations included in the reports are required to be incorporated in the grading plans and specifications. Section 21.66.040 of the County Code similarly requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into the project design. All future development in the Coastal Zone would also be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is located, pursuant to Section 20.66.040 of the County Code. Further, all future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the applicable area or master plan for which the development project is located.

Compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations would identify potential for hazards related to soil conditions on individual sites so the project can be designed to reflect site-specific geologic and soils conditions and prevent risks due to lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant. The project does not include any plans, policies, or programs that would modify these existing regulations or exempt future residential development from mandatory compliance with these requirements. Therefore, the implementation of the project would have less than significant impacts related to expansive soils.

**d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.**

**Less than Significant Impact.** Refer to Section 7.1(c). All development would be subject to compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations, among others, to reduce or

prevent impacts associated with expansive soils. Pursuant to Section 16.08.110 of the County Code, applicants for a proposed use triggering the need for a grading or building permit for site improvements would be required to prepare and submit a soil engineering report and engineering geology report for review and approval by the County Building Official. Recommendations included in the reports are required to be incorporated into the grading plans and specifications. Section 21.66.040 of the County Code similarly requires preparation of a geological report by a registered geologist or certified engineering geologist for certain types of development and for any development in an area of geologic hazards (e.g., landslide areas, near a potentially active fault, on slopes), as defined therein. All report recommendations are required to be incorporated into the project design. All future development in the Coastal Zone would also be required to comply with geologic report requirements established in the applicable Coastal Implementation Plan for which the development project is, pursuant to Section 20.66.040 of the County Code. Further, all future development projects in the inland planning areas would be required to comply with applicable seismic and geologic hazards policies established in the applicable area or master plan for which the development project is located. The project does not include any plans, policies, or programs that would modify these existing regulations or exempt future residential development from mandatory compliance with these requirements. Therefore, with compliance with the California Building Code, Monterey County Grading Ordinance, and required soil engineering report and engineering geology report recommendations, implementation of the project would have less than significant impacts related to expansive soils.

**e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.**

**Less Than Significant Impact.** Development resulting from the project has the potential to occur in places with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. However, numerous state and local regulations exist that would apply to all future development resulting from the HEU6, which adequately address this hazard. For instance, the 2010 General Plan's Public Services Element states that construction of new on-site septic systems is not permitted for development in the existing service area of a regional or subregional wastewater collection and treatment system. Public Services Element Policies PS-4.1, PS-4.2, PS-4.3, and PS-4.5 promote the use of wastewater collection and treatment systems for new development and deter the use of septic and alternative wastewater systems.

Further, all development would be subject to the California Plumbing Code, the County's Local Agency Management Program for Onsite Wastewater Treatment Systems, and Chapter 15.20, Sewage Disposal, of the County Code, which establish application and site evaluation requirements, among others, for on-site treated non-potable water systems and on-site wastewater treatment systems (OWTS). Similarly, development in the Coastal Zone would be required to comply with applicable policies and development standards related to septic systems established in the applicable

Coastal Implementation Plan for which the development project is located (e.g., Section 20.144.130 – Wastewater Management Facilities Development Standards). All developments that would require sewer service via a new OWTS would be required to obtain an OWTS installation permit from the Monterey County Health Department, Environmental Health Bureau. The permit would require site evaluation (i.e., an assessment of the property's soil characteristics, including soil profile analysis and absorptive characteristics, topography, and groundwater level) by a qualified professional. The permit application must include a summary of site evaluation activities, including conclusions and recommendations that specifically state if the proposed OWTS (or proposed lots of record, in the case of new subdivisions of land) meet(s) the standards in Chapter 15.20 of the County Code and the Local Agency Management Program. The site evaluation is required to include specific recommendations about the location and design of the OWTS(s), including soil application rate for each dispersal system area. In addition, the Carmel Valley Master Plan, which would apply to Opportunity Sites 17 through 23, 35 through 38, 54, and 56, states that development projects that include an OWTS shall provide geologic and soil surveys that assess if conditions could preclude or restrict the possibility of satisfactorily locating the OWTS where it would not pose a threat of contamination to the aquifer. This policy would specifically require review for proper siting and design in accordance with the standards of the Carmel Valley Wastewater Study.

The project does not include any plans, policies, or programs that would modify these existing regulations or exempt future residential development from mandatory compliance with these requirements. Therefore, compliance with the California Plumbing Code, the Local Agency Management Program, and Chapter 15.20 of the County Code would ensure that project impacts related to the use of septic tanks or alternative wastewater disposal systems would be less than significant.

**f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

**Less than Significant Impact with Mitigation Incorporated.** Refer to Section 4.7, Geology and Soils, for discussion of the project's potential to disturb potentially significant paleontological resources. As described therein, impacts related to disturbance of potentially significant paleontological resources would be less than significant with mitigation.

## 7.2 Population and Housing

According to Appendix G of the CEQA Guidelines, the project would have a significant impact on population and housing if it would:

**a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).**

**Less than Significance Impact.** The California Department of Housing and Community Development (CA HCD) issues a Regional Housing Needs Determination to the Association of

Monterey Bay Area Governments (AMBAG) for Monterey and Santa Cruz Counties,[1] which includes an overall housing need number, as well as a breakdown of the percentage of units required in four income distribution categories (i.e., very low, low, moderate, and above moderate). AMBAG is required to distribute this overall regional allocation number to the jurisdictions in the region for the eight-year planning period (i.e., 33,274 housing units) for the creation of housing units. These quantified numbers are known as the Regional Housing Needs Allocation (RHNA). AMBAG developed the Final 6th Cycle RHNA Plan 2023–2031 pursuant to California housing law (California Government Code, Section 65580 et seq.) to assign existing and projected housing needs to jurisdictions in the Monterey Bay Area region, including the County of Monterey. Based on the final RHNA plan, the County was allocated 3,326 housing units across four income categories. The HEU6 establishes programs, policies, and actions to further the goal of meeting the existing and projected housing needs for residents of all income levels throughout UMC. The purpose of the HEU6 and other necessary approvals to implement HEU6 (project) are to accommodate the RHNA assigned to the County for the 8-year planning period from 2023 to 2031. The Sites Inventory provided in the HEU6 is adequate for the development of housing to meet the RHNA target with a reasonable capacity buffer[2], and the County will rezone opportunity sites to create enough capacity to meet the RHNA target.

#### Population Growth Forecasts

Monterey County has experienced and continues to experience population growth, as shown in Table 7-1, Monterey County and Unincorporated Monterey County Population Growth. From 2010 to 2020, the total population in UMC increased by 4.26 percent.

**Table 7-1. Monterey County and Unincorporated Monterey County Population Growth**

| Year | Total Monterey County Population | Percent Increase | UMC Population | Percent Increase |
|---|---|---|---|---|
| 1980 | 290,444 | — | 84,497 | — |
| 1990 | 355,660 | 22.45% | 100,479 | 18.9% |
| 2000 | 401,762 | 12.96% | 100,252 | -0.23% |
| 2010 | 415,057 | 3.31% | 100,213 | 0.04% |
| 2020 | 439,035 | 5.78% | 104,482 | 4.26% |

**Source:** County of Monterey 2025.

[1] The state mandate for distributing the RHNA is tied to the state designation of a Council of Governments (COG). Each COG is expected to distribute the RHNA to their member jurisdictions. AMBAG is the Metropolitan Planning Organization for the Counties of San Benito, Santa Cruz, and Monterey and has prepared a 2045 MTP/SCS for the tri-county region. However, it is the COG for only the Counties of Santa Cruz and Monterey. For this reason, HCD makes a separate determination for San Benito County and tasks the San Benito County Council of Governments (SBtCOG) with developing its own RHNA Plan. AMBAG does coordinate with SBtCOG so that its RHNA Plan is consistent with the 2045 MTP/SCS.

[2] HCD recommends a buffer of 15 to 30 percent or more units in each income level to account for potential site-specific constraints or delays in development, particularly for lower-income housing. This buffer complies with the purpose of Senate Bill 166 (No Net Loss Law) to ensure that the County maintains adequate capacity throughout the 8-year planning period. The reasonable capacity buffer for HEU6 includes 17 percent of gross RHNA numbers for the very low-income level, 34 percent for the low-income level, and 70 percent for the moderate-income level above the County's RHNA targets so that the County maintains adequate capacity to meet its targets.

AMBAG's Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) provides a jobs-based approach to forecasting trends in growth for the region. According to AMBAG, Monterey County's population is projected to reach 110,326 by the 2045 MTP/SCS horizon year, as shown in Table 7-2, AMBAG MTP/SCS Growth Forecasts. The HEU6 anticipates that the growth will continue, thereby increasing the demand for various housing types and sizes to accommodate this growth.

**Table 7-2. AMBAG MTP/SCS Growth Forecasts**

| | 2023[1] | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|---|
| Population | 104,555 | 108,432 | 109,976 | 110,170 | 110,277 | 110,326 |
| Housing | 40,529 | 40,271 | 40,620 | 40,908 | 41,271 | 41,408 |
| Employment | 60,346 | 60,574 | 61,553 | 62,439 | 63,396 | 64,395 |

**Source:** AMBAG 2024, Revised Draft 2026 Subregional Growth Forecast, AMBAG Region and Jurisdictions.

**Plus Project Growth Projections**

As described in Chapter 3, this PEIR evaluates a reasonable development capacity of 4,434 housing units on 56 opportunity sites for the majority of analyses in Chapter 4, Environmental Analysis. However, given that the project would rezone a portion of each of the opportunity sites as HDR/25 (high density residential at 25 dwelling units per acre) and HDR/30 (high density residential at 30 dwelling units per acre), a theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites is technically permitted (although highly unlikely) under the proposed zoning. This upper bound scenario was used for technical analyses that require conservative modeling, including for vehicle miles traveled (Section 4.16, Transportation), air emissions (Section 4.3, Air Quality), greenhouse gas emissions (Section 4.8, Greenhouse Gas Emissions), and noise (Section 4.13, Noise), to ensure the PEIR fully discloses the potential environmental consequences of the project by analyzing the highest intensity of development legally permissible under the proposed zoning. However, this theoretical maximum capacity assumption is not used for the majority of chapters in this PEIR because it is an unreasonable expectation of future growth.[3]

While the PEIR uses the higher theoretical density, where applicable, to ensure that all potential environmental impacts are accounted for, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in the UMC. For instance, as described in HEU6 Section 2.5.6, Housing Units Permitted, building permits for only 1,848 housing units were issued in UMC during the Fifth Cycle Housing Element planning period. Additionally, Chapter 3, Housing Constraints, of the HEU6 lists a host of constraints to residential development in UMC due to a range of financial, environmental, and governmental factors, such as land and construction costs; availability of financing; conservation of biological resources; the

[3] Each section in Chapter 4, Environmental Analysis, of the PEIR identifies in the introduction the assumptions used in the analysis, either buildout of a reasonable development capacity of 4,434 housing units, the theoretical maximum capacity of 12,497 housing units, or the location of the opportunity site parcels, to determine impacts on the environment.

suitability of land for development due to potential exposure to seismic, flooding, wildfire, and drought conditions; development standards; and zoning. While the HEU6 includes a range of programs and policies to aggressively address these development constraints, it will be challenging for development trends in UMC to increase from only 1,848 housing units during the Fifth Cycle Housing Element planning period to more than 4,434 housing units during the Sixth Cycle Housing Element planning period (a nearly 140 percent increase). Additionally, the zoning capacity is proposed as HDR/25 and HDR/30 to help the County accommodate enough capacity to meet the RHNA plus the reasonable capacity buffer. Therefore, it is unreasonable to assume development at the theoretical maximum capacity in the UMC during the Sixth Cycle Housing Element period (2023-2031). As such, the reasonable development capacity of 4,434 housing units is used in the analysis below to estimate future population growth with implementation of the project.

Table 7-3, Existing Plus Project Growth Projections, compares the project's anticipated housing and population growth to existing 2023 conditions. As indicated in Table 7-3, the project would increase Monterey County's housing stock by approximately 9.9 percent (adding 4,434 dwelling units) and its population by approximately 11 percent (adding 12,859 people). With pipeline sites and Accessory Dwelling Units (ADUs), which could be developed independently of the HEU6, an additional 4,243 people could be anticipated. However, the projected growth is attributed to meeting state-mandated RHNA targets, plus a 15–30 percent buffer to ensure compliance with No Net Loss provisions. As such, the growth is not considered unplanned. This RHNA has been mandated by the state to accommodate the existing and projected future housing needs for residents in UMC. Moreover, according to the U.S. Census Bureau's American Community Survey, which tracks geographical movement over the past year, the 5-year average estimate for 2023 data indicates that an estimated 40,103 (9.7 percent) of the 411,511 Monterey County residents moved, while the remainder stayed in the same residence (U.S. Census Bureau 2023). Of the 40,103 people who moved, 21,824 people (54 percent) moved in Monterey County, and others moved to a different county or state. Based on this geographical mobility trend, it is anticipated that the majority of new housing units processed under the HEU6 would likely be occupied by people already residing in Monterey County, including in-migration from incorporated cities, rather than from outside Monterey County or state. Therefore, the stated increase of 12,859 people (or 11 percent) overstates the actual population growth; the true increase would represent only a fraction of that total. However, it is important to note that the median sales and rental prices in UMC have continued to increase over the last several years and are unaffordable for most people currently living and working in UMC. As noted in the HEU6, home sales price data, median home prices in Monterey County were recorded at $825,005 in June 2024. From 2020 to 2024, median home prices increased 39 percent from $600,000 to $800,000 (Zillow 2024). Additionally, Zillow rentals showed the median rent cost increased 23 percent from $2,131 to $2,622. While median income has increased slightly (50 percent), this increase has not kept pace with rental (73 percent increase between 2015 and 2024) and sales price (95 percent increase since 2014) increases (Zillow

2024). As such, out-of-area migration and purchasing of homes in UMC is expected and included in the population increases noted above and in Table 7-3. Additionally, while this PEIR assumes buildout of the HEU6 to evaluate the potential impacts of the project, the project would facilitate housing development through implementation of a policy document and would not directly result in actual construction of development projects that would induce direct growth or roadway or other infrastructure construction to induce indirect growth.

**Table 7-3. Existing Plus Project Growth Projections**

| Description | Housing (Dwelling Units) | Population |
|---|---|---|
| 2023 Estimate/Existing[1] | 40,529 | 104,555 |
| 2031 Estimated Project | 4,434 | 12,859[2] |
| **2023 Existing Plus Project** | **44,963** | **117,414** |
| **% Change** | **9.9%** | **10.9%** |
| 2031 Estimated Pipeline and ADUs | 1,463 | 4,243[2] |
| **2023 Existing Plus Project Plus Pipelines and ADUs** | **46,426** | **121,657** |
| **% Change** | **12.7%** | **14.1%** |

ADUs = Accessory Dwelling Units

[1] AMBAG 2024.

[2] Based on 2.9 people per household (State of California Department of Finance 2020).

Table 7-4, AMBAG MTP/SCS Plus Project Growth Projections, extrapolates AMBAG's 2045 forecast back to 2031 to align with the RHNA planning period (2023–2031). Based on this extrapolation and a calculated annual growth rate, Monterey County's population in 2031 would be approximately 119,513 with project implementation, approximately 10.8 percent higher than AMBAG's extrapolated forecast for that year. With pipeline sites and ADUs, which could be developed independently of the HEU6, approximately 120,976 people are anticipated. However, the housing element, as a policy document, does not propose any specific housing development. Instead, it identifies policies and programs to facilitate future development that aligns with state-mandated housing needs. Furthermore, as explained above, this figure overstates the actual population increase in UMC, as most homebuyers or renters would represent intra-county relocation rather than net new arrivals from outside Monterey County or the state.

**Table 7-4. AMBAG MTP/SCS Plus Project Growth Projections**

| Description | Housing (Dwelling Units) | Population |
|---|---|---|
| 2023 Estimate/Existing[1] | 40,529 | 104,555 |
| 2045 AMBAG Forecast | 41,408 | 110,326 |
| Change 2023 to 2045 | | +5,771 |
| Change per Year 2023 to 2045 | | +262.32 |
| Extrapolated AMBAG 2031 Population[2] | | 106,654 |
| 2031 Estimated Project | 4,434 | 12,859[3] |
| **Extrapolated AMBAG 2031 Plus Project** | | **119,513** |
| **% Change from AMBAG Forecast in 2031** | | **10.8%** |

**Table 7-4. AMBAG MTP/SCS Plus Project Growth Projections**

| Description | Housing (Dwelling Units) | Population |
|---|---|---|
| **Extrapolated AMBAG 2031 Plus Project Plus Pipelines and ADUs** | | **120,976** |
| **% Change from AMBAG Forecast in 2031** | | **11.8%** |

[1] AMBAG 2024

[2] Change per year population of 263 x 8 years (2023 to 2031) + Existing 2023 population of 104,555 = 106,654.

[3] Based on 2.9 people per household (State of California, Department of Finance, Table 2: E-5 City/County Population and Housing Estimates, 4/1/2020. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/)

**Planned Population Growth**

While the project would indirectly contribute to population growth as described above, this growth is not considered unplanned given that these units are mandated by state law and included in the AMBAG Final 6th Cycle RHNA Plan 2023–2031. Additionally, per California Government Code, Section 65584.01, RHNA is determined based on projected housing need, not constrained by past development trends or regional forecasts. Therefore, RHNA targets often exceed the growth projections of Metropolitan Planning Organizations such as AMBAG, and such exceedances do not constitute substantial unplanned growth. The HEU6 is consistent with the County's RHNA plus a reasonable capacity buffer as recommended by CA HCD and would accommodate projected population growth and associated housing demand to minimize overcrowding, high cost burdens, and homelessness.

As described above, based on historical geographical mobility trends, the majority of new housing units processed under the HEU6 would likely be occupied by people already residing in Monterey County rather than from outside Monterey County or state. Additionally, development facilitated by the project is intended to be dispersed throughout Monterey County to create managed and planned levels of growth in specific areas. The opportunity sites were chosen, in part, based on proximity to existing urban development and public services and utilities to grow areas where there is existing infrastructure and priority growth areas identified in the 2010 General Plan (e.g., Community Areas, rural Centers, Affordable Housing Overlays) and to avoid sprawl or haphazard development. It is also important to note that future housing development would occur incrementally depending on market conditions and other factors, such as availability of utilities (e.g., water supply and sewer capacities) and public services (e.g., fire and police), so that unplanned growth does not occur. As discussed in Section 4.18, Utilities and Service Systems, only projects with adequate infrastructure would be permitted, ensuring that substantial unplanned growth does not occur. All future development projects must also comply with Monterey County Code requirements and other applicable regulations.

As the growth resulting from the project is considered and evaluated throughout this PEIR, and the project would be adopted as a mandated element of the County's 2010 General Plan and Local Coastal Program, the population growth resulting from the project would not be unplanned. Upon

project approval, future housing facilitated by the project would be considered planned development that helps the County meet its RHNA goals. Therefore, impacts would be less than significant.

Furthermore, the State of California requires that all local governments adequately plan to meet the housing needs of their communities, including planning to accommodate RHNA. Given that the State of California is currently in an ongoing housing crisis due to an insufficient housing supply, the additional units added under the project would further assist in addressing the existing crisis and in meeting the housing needs of Monterey County's residents. Furthermore, the project has been submitted to the CA HCD for review and approved to ensure that it would adequately address the housing needs and demands of Monterey County.

**b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.**

**Less than Significant Impact.** The project would allow for greater residential densities in opportunity sites than are currently allowed on these sites. Although some of the opportunity sites contain existing residential units, HEU6 indicates these units do not impede redevelopment, as they do not necessarily need to be demolished; areas excluding them could still be developed to achieve the proposed densities for the opportunity sites. Furthermore, the California Legislature has adopted three state laws, the Density Bonus Law, Housing Element law, and the Housing Crisis Act of 2019, to ensure that new housing developments do not reduce the total number of existing dwellings and do not reduce the number of dwellings housing lower-income individuals. For instance, replacement housing requirements dictate that housing projects must create at least as many housing units as will be demolished. Projects must also replace units rented by lower-income households with units affordable to lower-income tenants and provide relocation and other benefits to lower-income tenants who are displaced by the new construction (ABAG 2025).

Specifically, projects that demolish existing units or build on a site that has had units demolished in the last five years are required to "include at least as many residential dwelling units as the greatest number of residential dwelling units that existed on the project site within the last five years." New projects are also required to include deed-restricted, affordable units if there are or have been any "protected units" on the project site. "Protected Units" include:

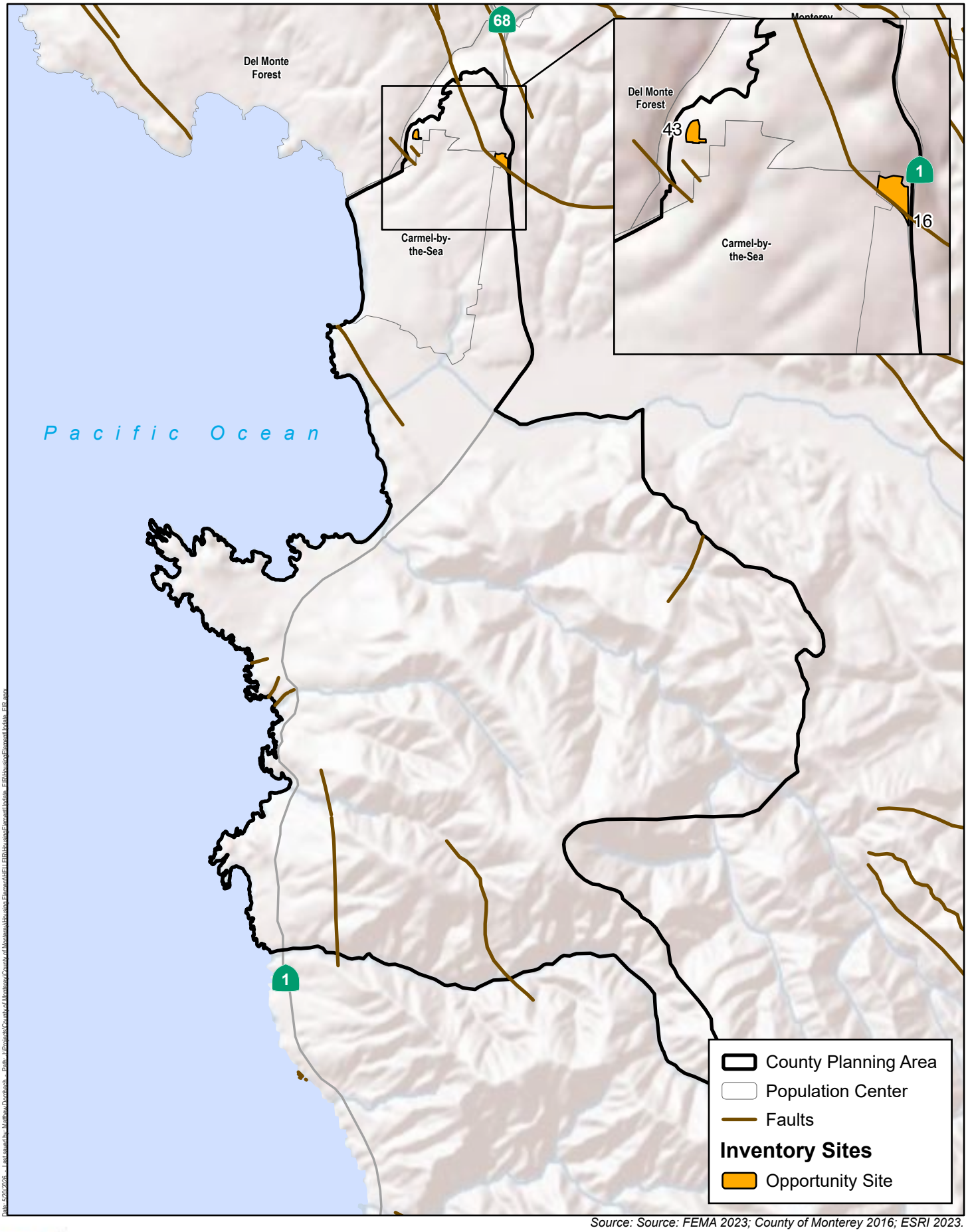
1. Any units that had a low-income deed-restriction for any of the previous five years
2. Any units that were subject to local rent control for any of the previous five years
3. Any units that were rented by a tenant who was low income for any of the previous five years
4. Any units that were removed from the market per the Ellis Act (Section 7060) in the previous ten years

If the site includes protected units, the developer is required to replace those units by creating at least as many new deed-restricted, affordable units as the number of protected units that existed

on the project site in the last 5 years. The affordability of the new units must be equal to the income category level of any existing or prior tenants, or if unknown, the units must be affordable for the low-income category (CA HCD 2020).

Replacement housing requirements apply to any site listed in a jurisdiction's Sixth Cycle Housing Element. The Housing Crisis Act of 2019 and amendments effective January 1, 2022, expanded that requirement to any housing development containing one or more units that proposed to demolish any existing units. The purpose of the replacement requirements is to prevent the loss of housing units and the displacement of lower-income households. State law does not allow local agencies to approve housing unless the proposed development complies with the applicable replacement housing requirements (ABAG 2025). Therefore, in compliance with state replacement housing requirements, residential developments streamlining under the HEU6 would be required to replace existing units to be demolished at an equivalent affordability level. The project would not displace a substantial number of existing people or housing; rather, it would facilitate an increase in housing supply to meet the state-mandated RHNA. Impacts would be less than significant.

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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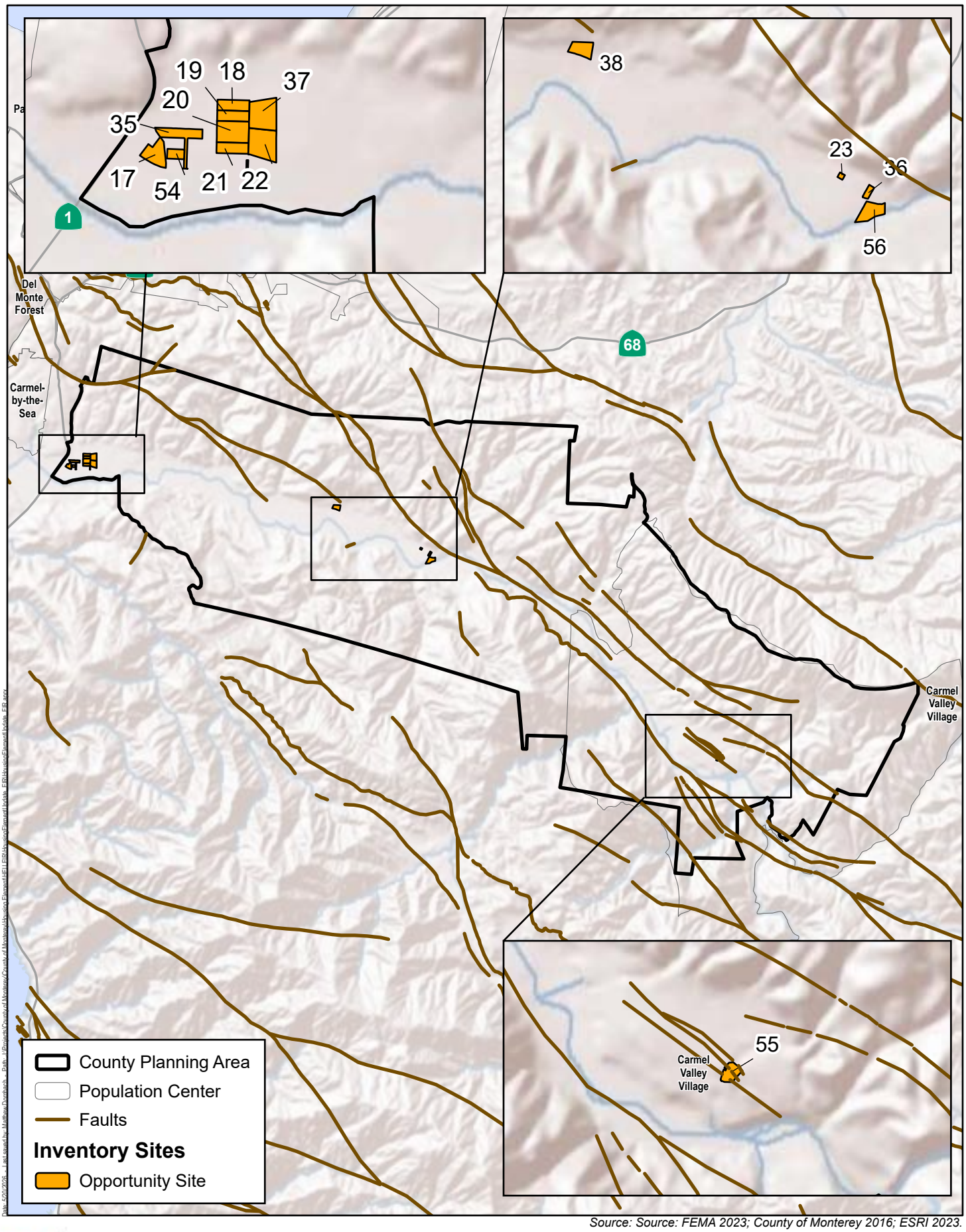
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Miles

**Figure 7-1a**

Earthquake Faults - Carmel Area Land Use Plan

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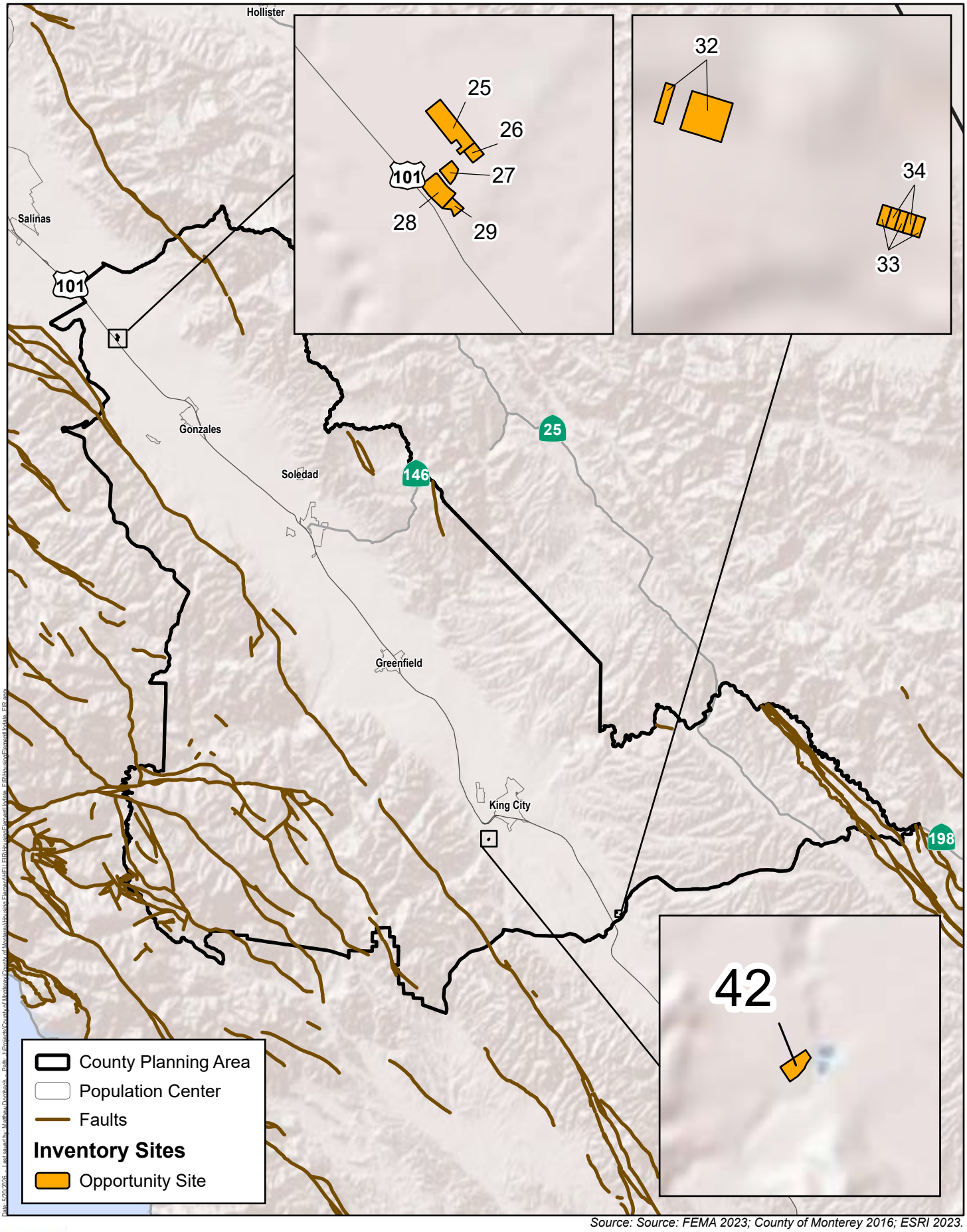

*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

**Figure 7-1b**

Earthquake Faults - Carmel Valley Master Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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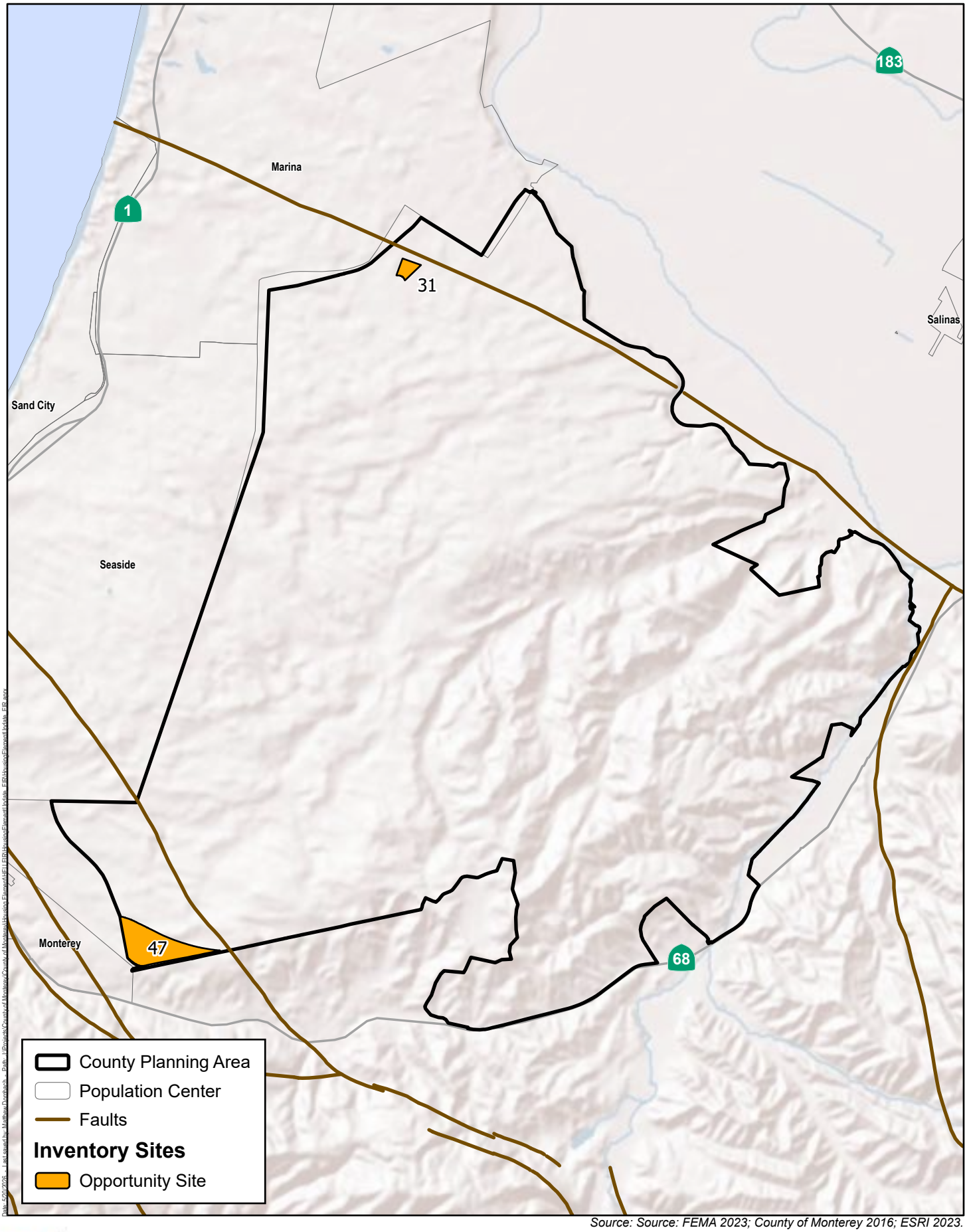
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**Figure 7-1c**

Earthquake Faults - Central Salinas Valley Area Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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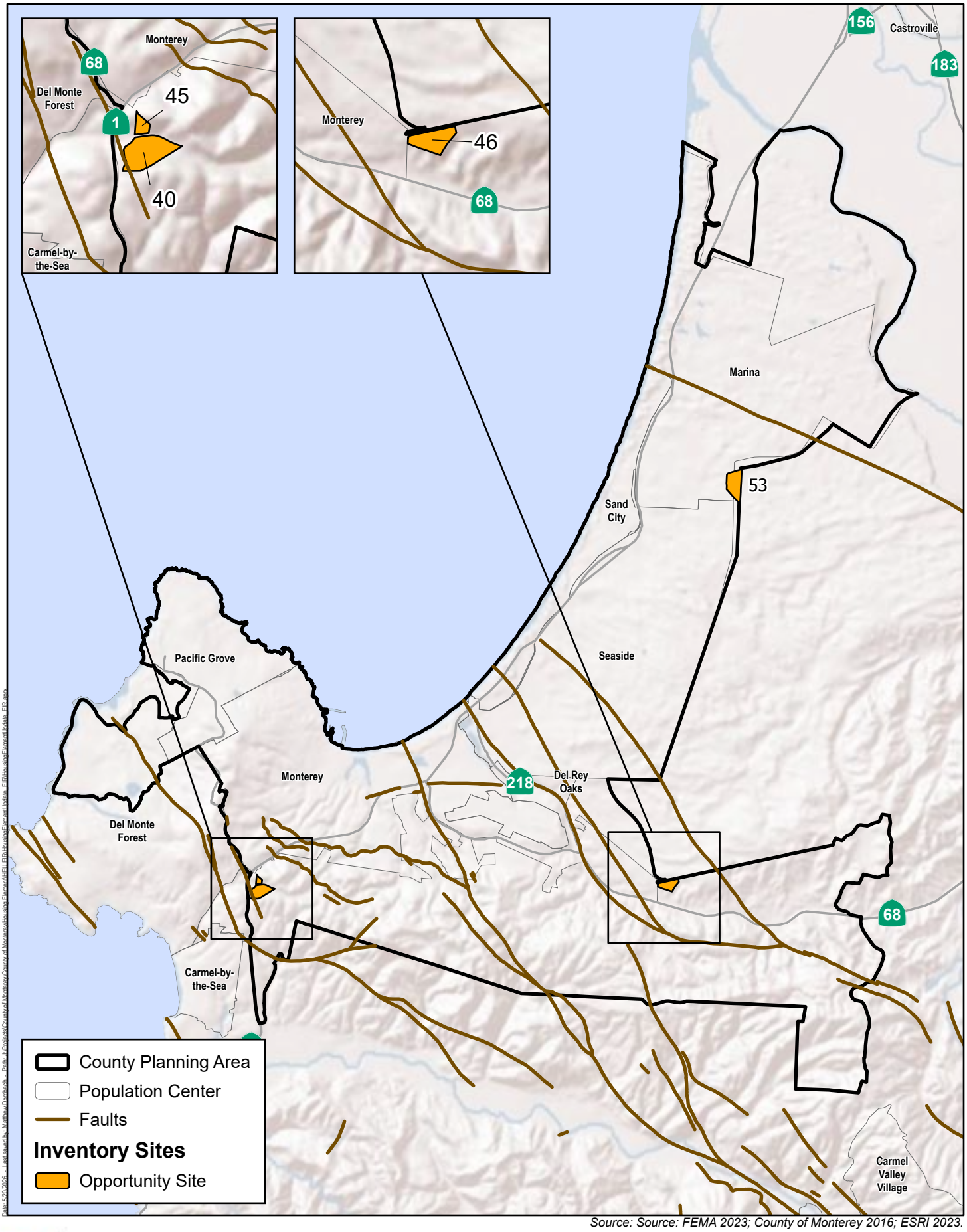
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**Figure 7-1d**

Earthquake Faults - Fort Ord Master Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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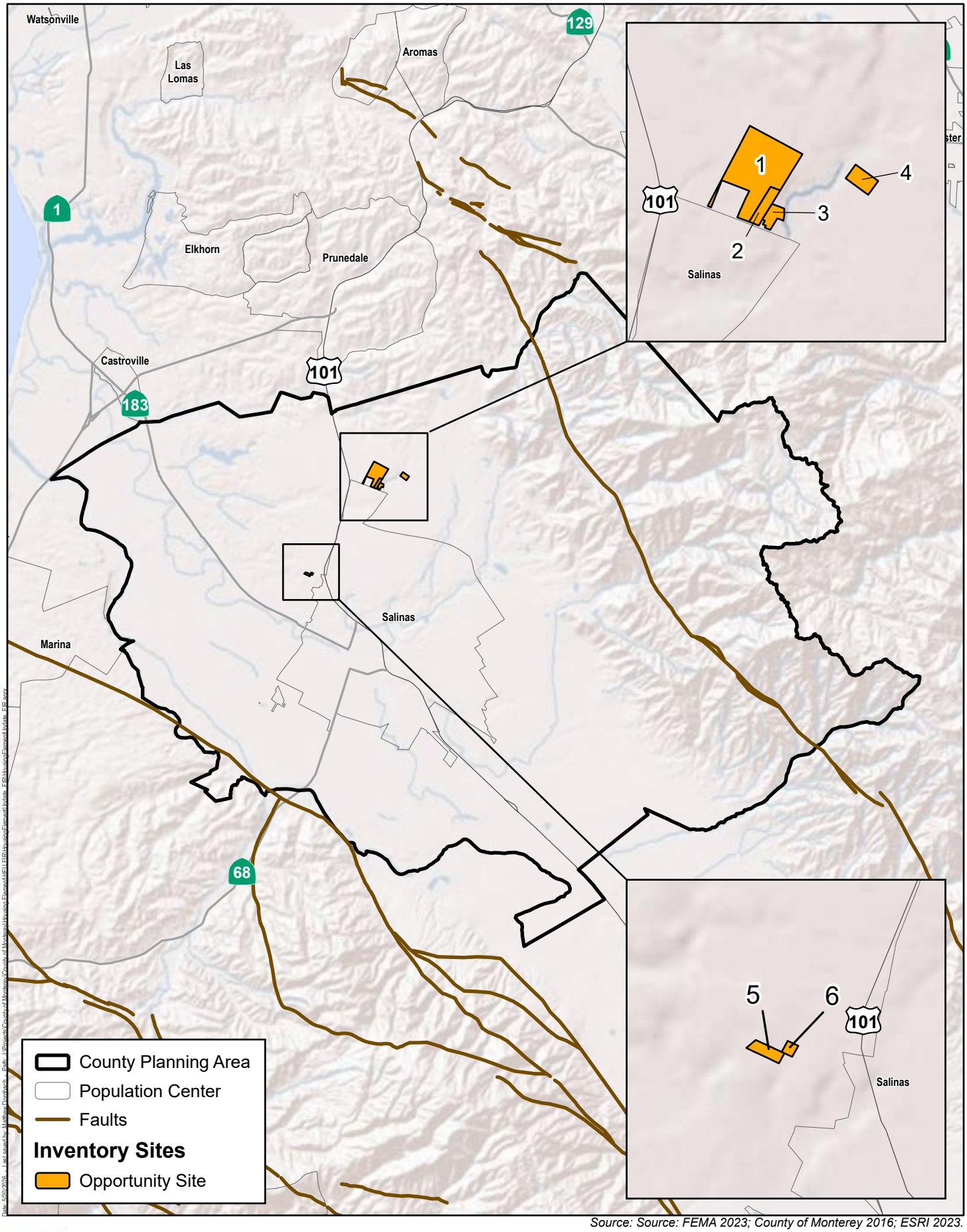
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**Figure 7-1e**

Earthquake Faults - Greater Monterey Peninsula Area Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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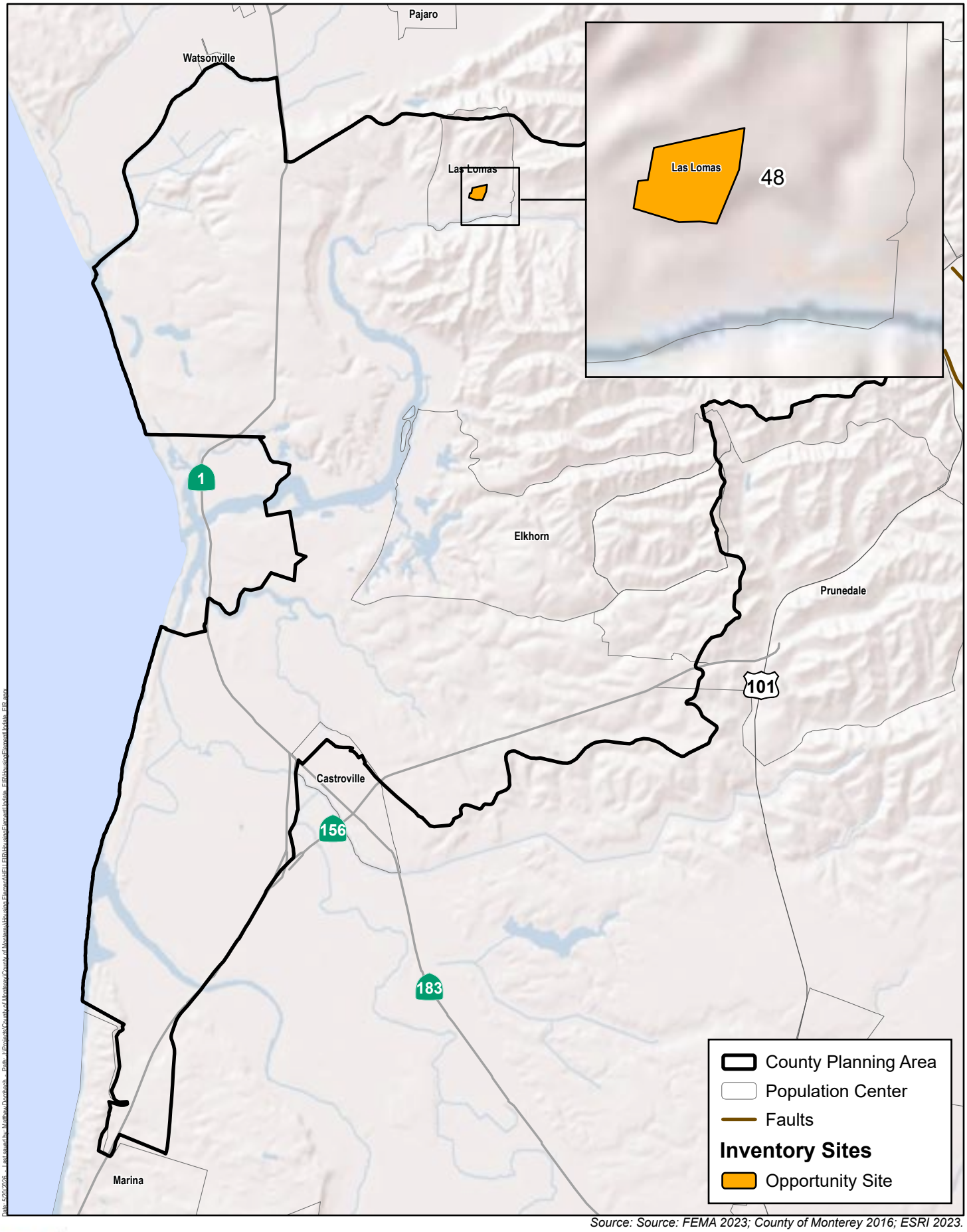
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**Figure 7-1f**

Earthquake Faults - Greater Salinas Area Plan

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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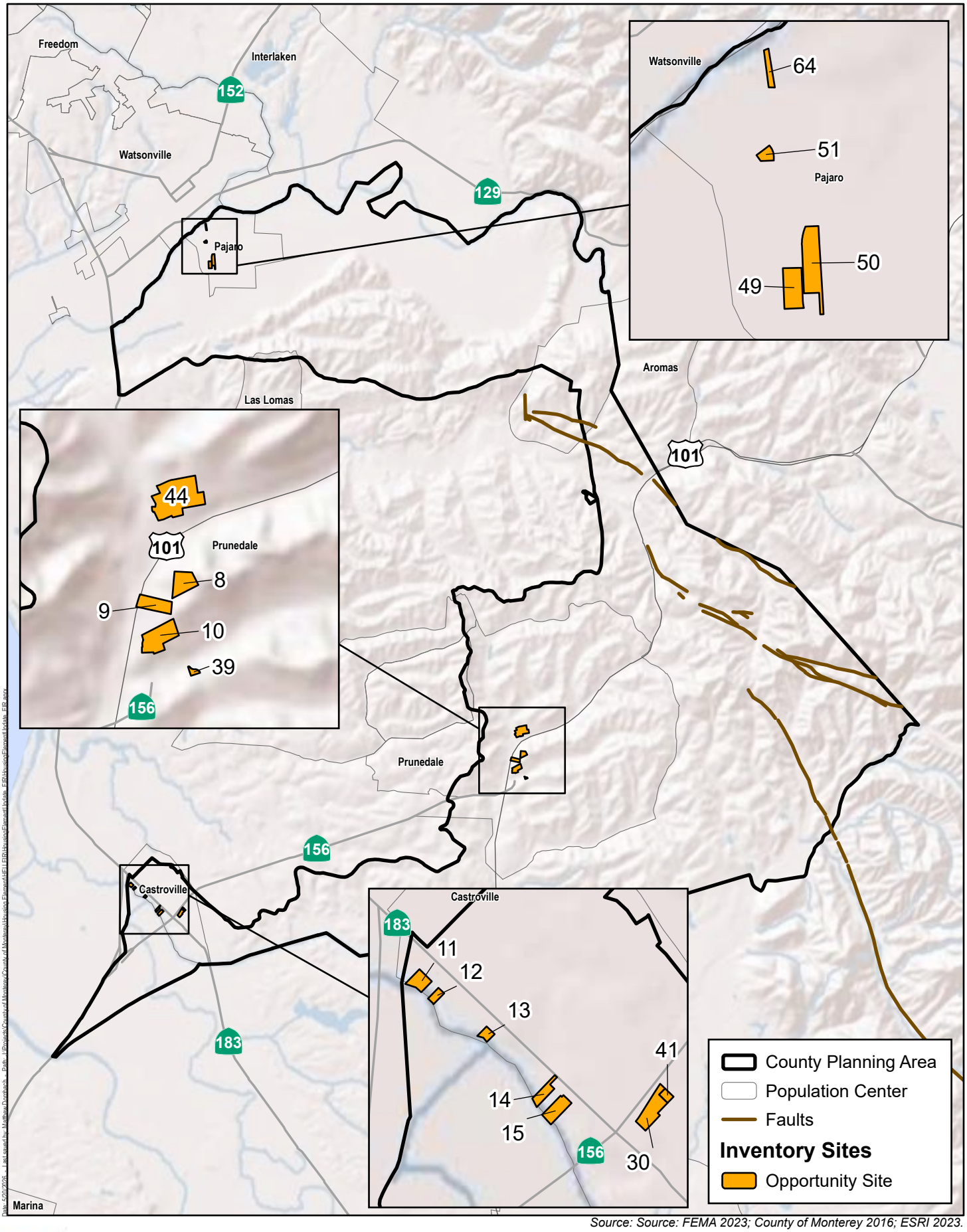
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**Figure 7-1g**

Earthquake Faults - North County Land Use Plan (Coastal)

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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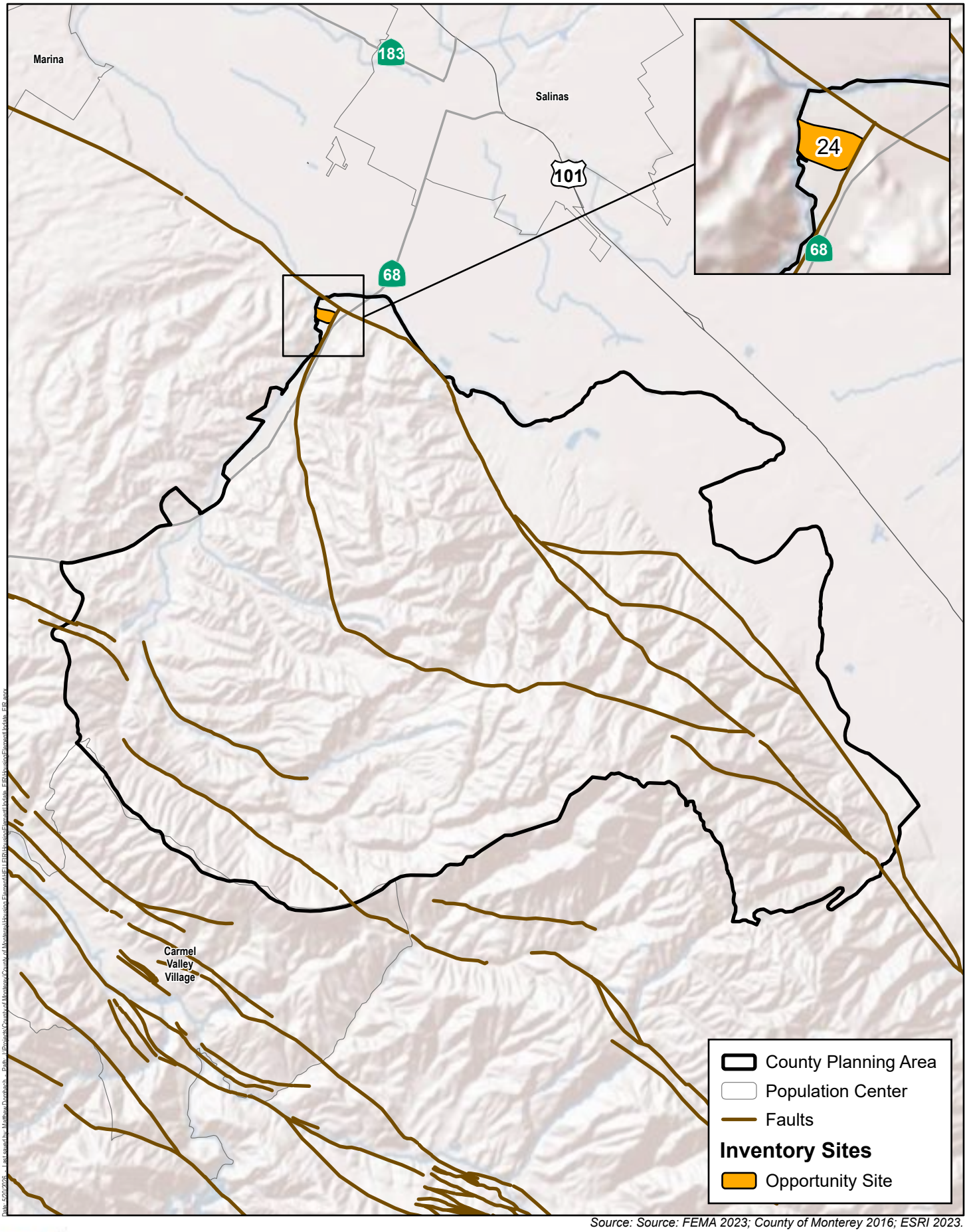
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**Figure 7-1h**

Earthquake Faults - North County Area Plan (Inland)

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*Source: Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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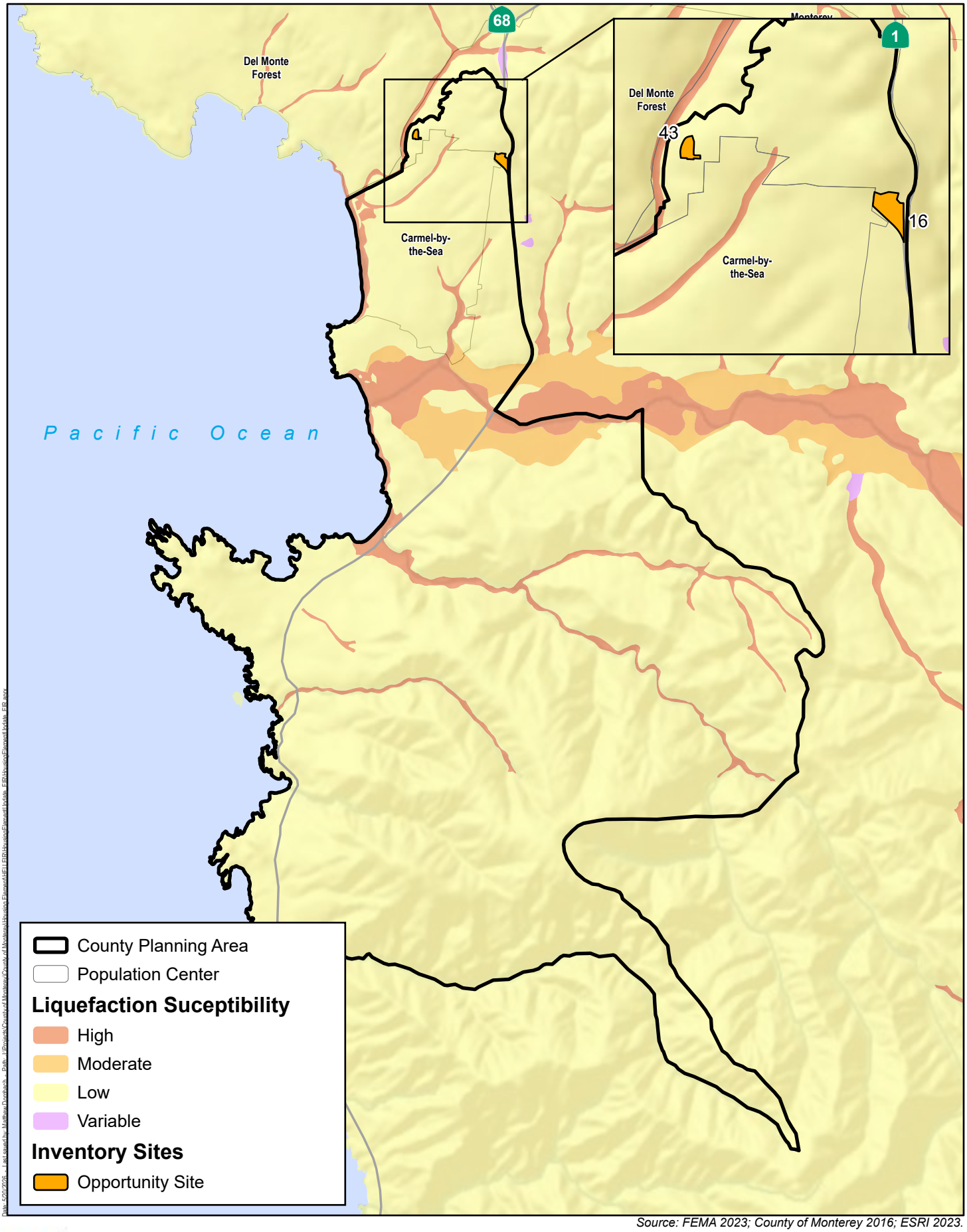
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**Figure 7-1i**

Earthquake Faults - Toro Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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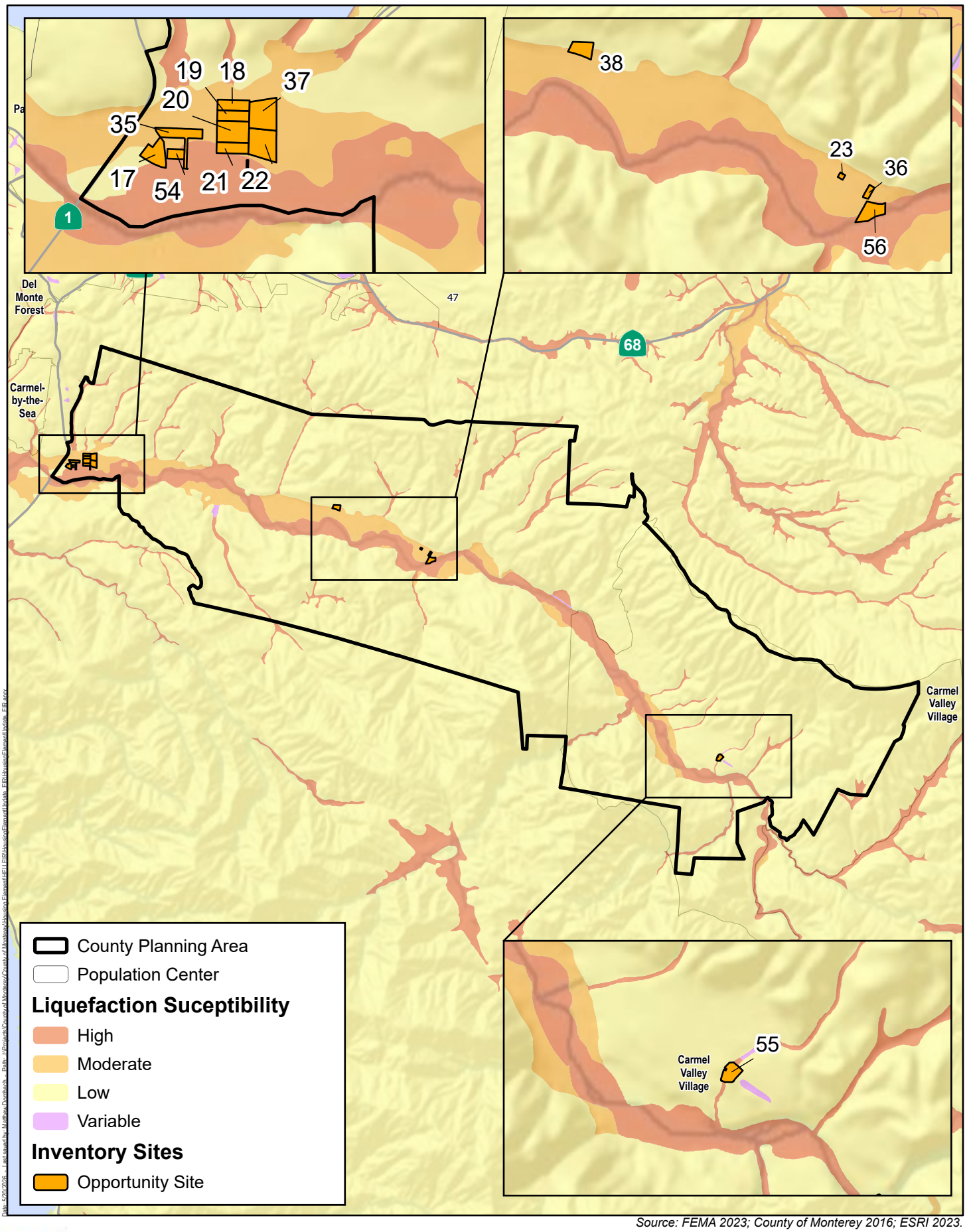
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**Figure 7-2a**

Liquefaction Susceptibility - Carmel Area Land Use Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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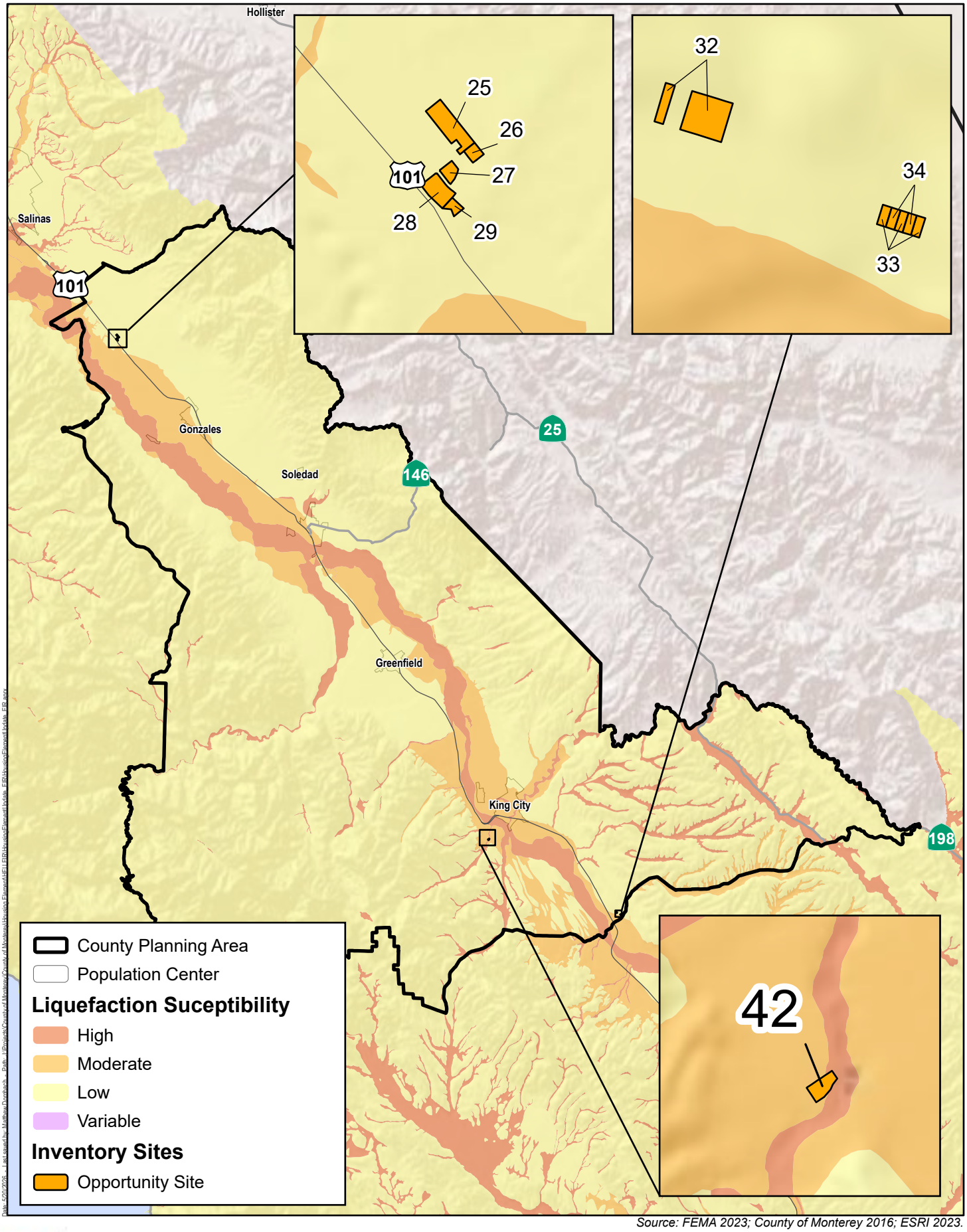
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**Figure 7-2b**

Liquefaction Susceptibility - Carmel Valley Master Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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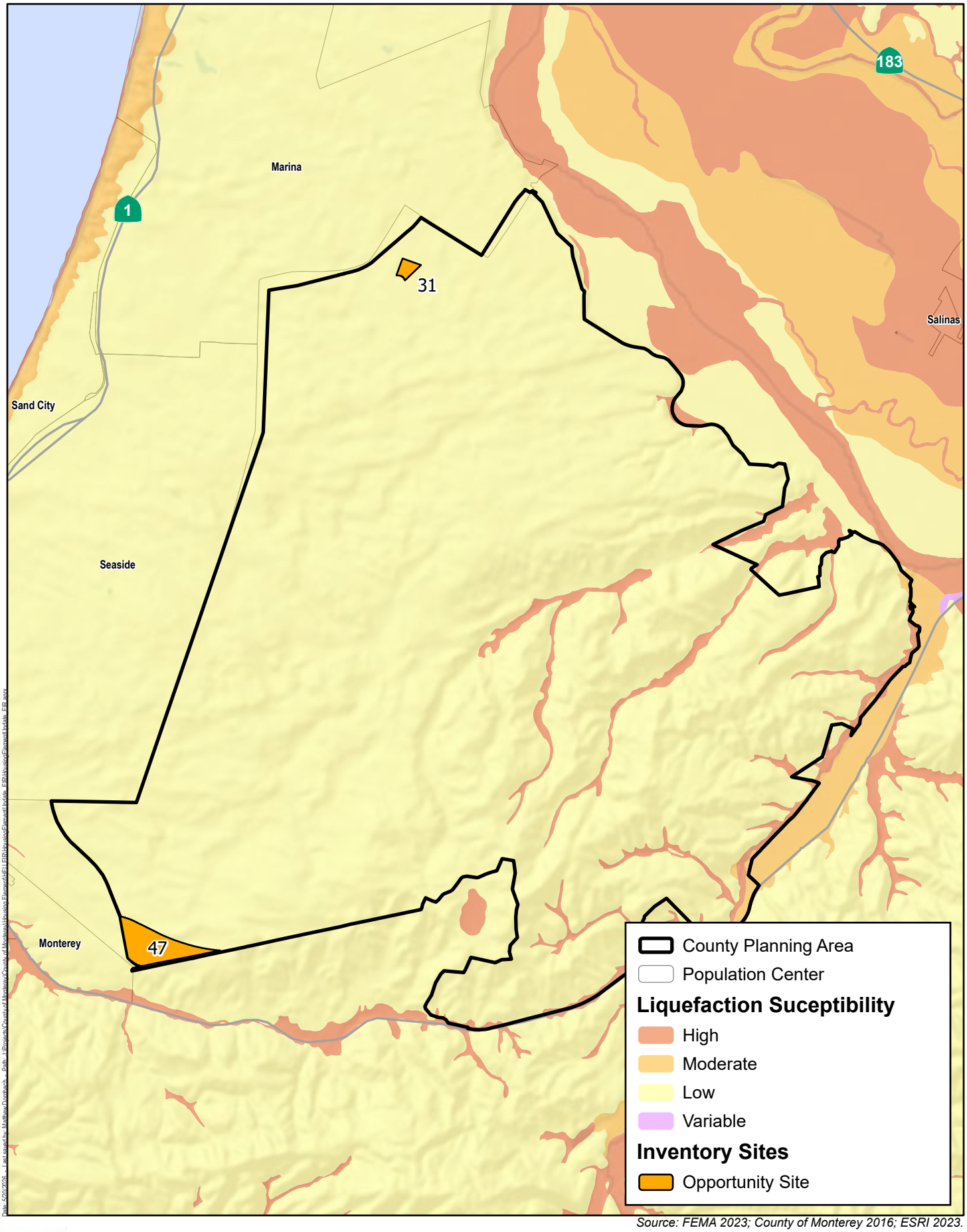
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**Figure 7-2c**

Liquefaction Susceptibility - Central Salinas Valley Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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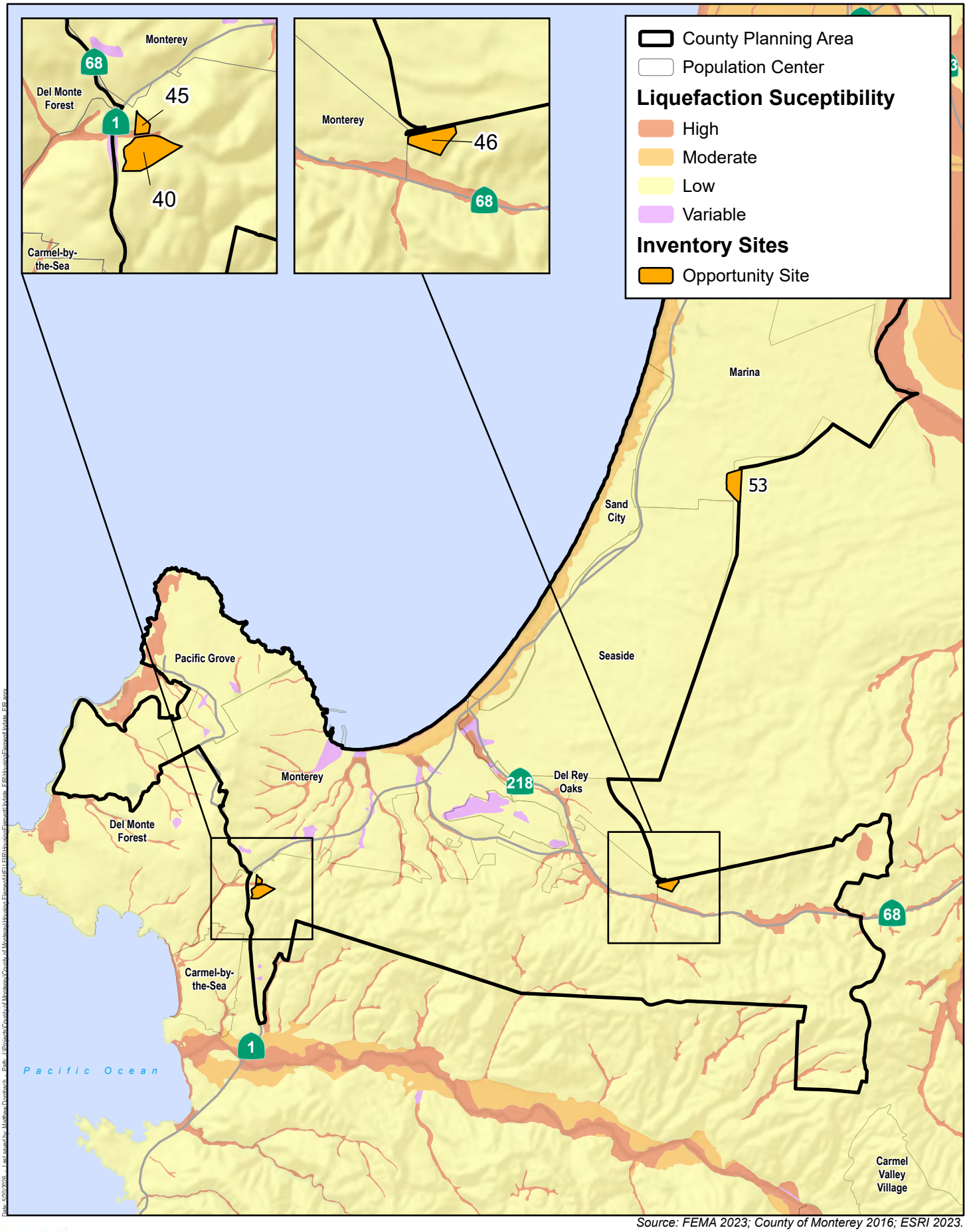
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**Figure 7-2d**

Liquefaction Susceptibility - Fort Ord Master Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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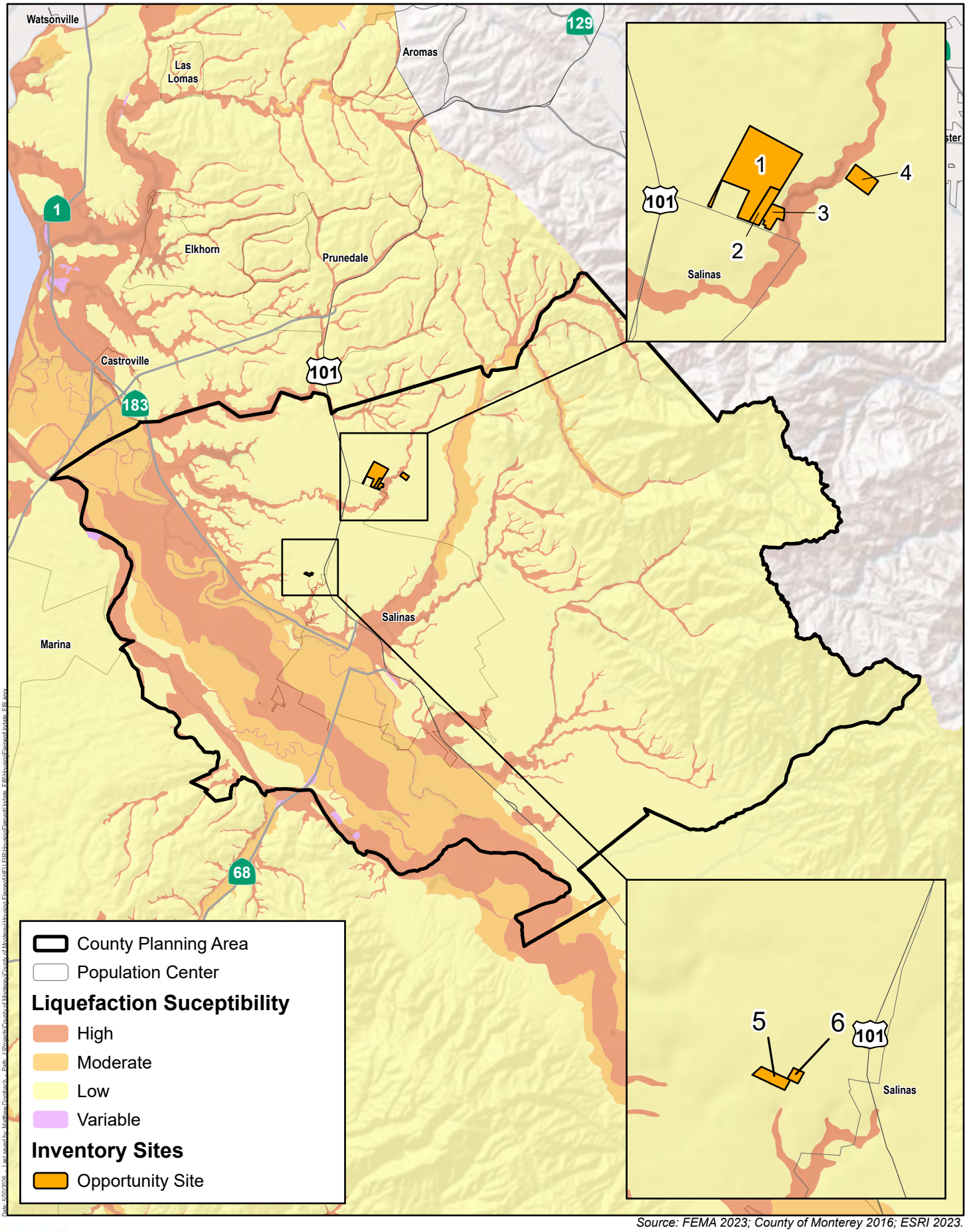
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**Figure 7-2e**

Liquefaction Susceptibility - Greater Monterey Peninsula Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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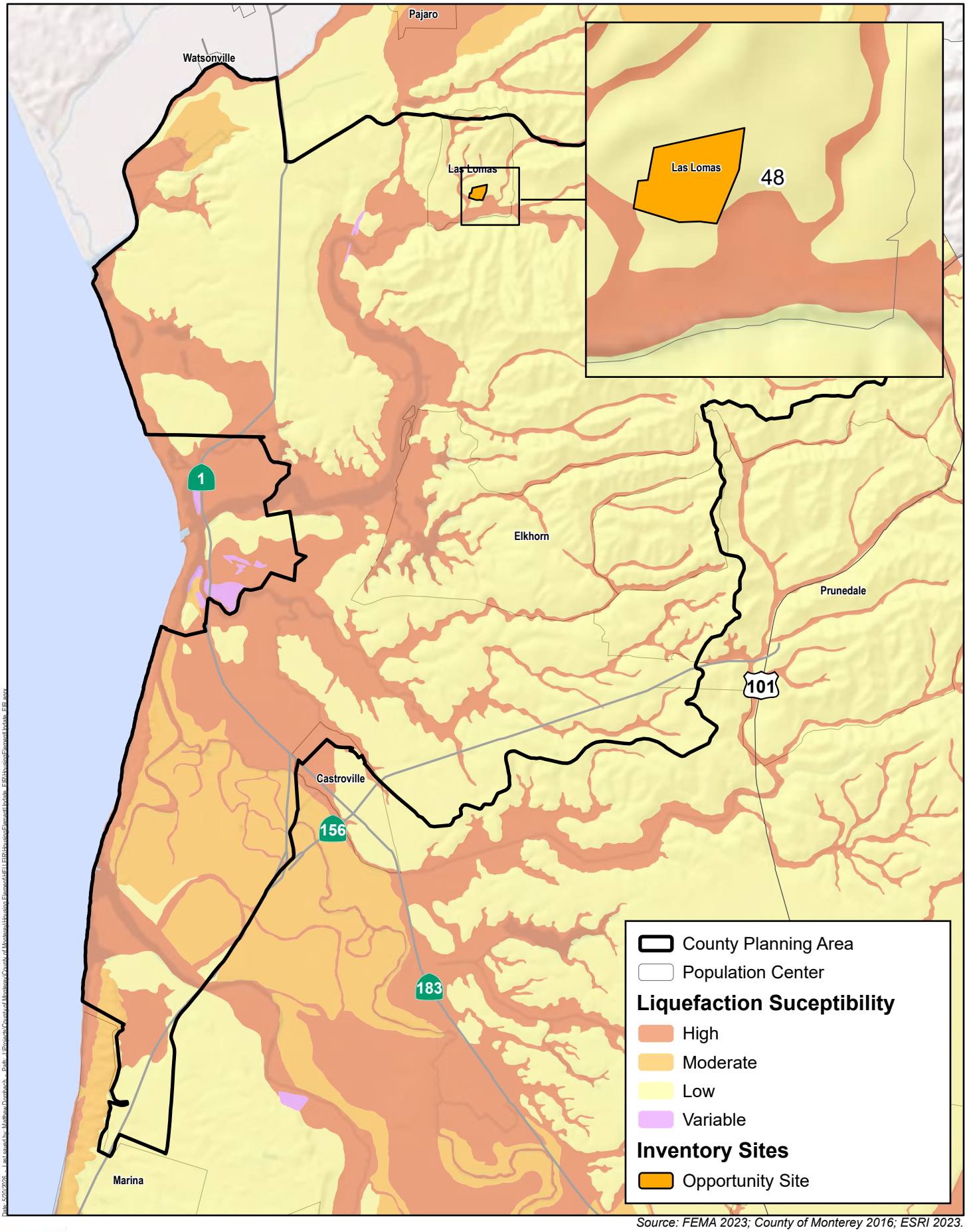
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**Figure 7-2f**

Liquefaction Susceptibility - Greater Salinas Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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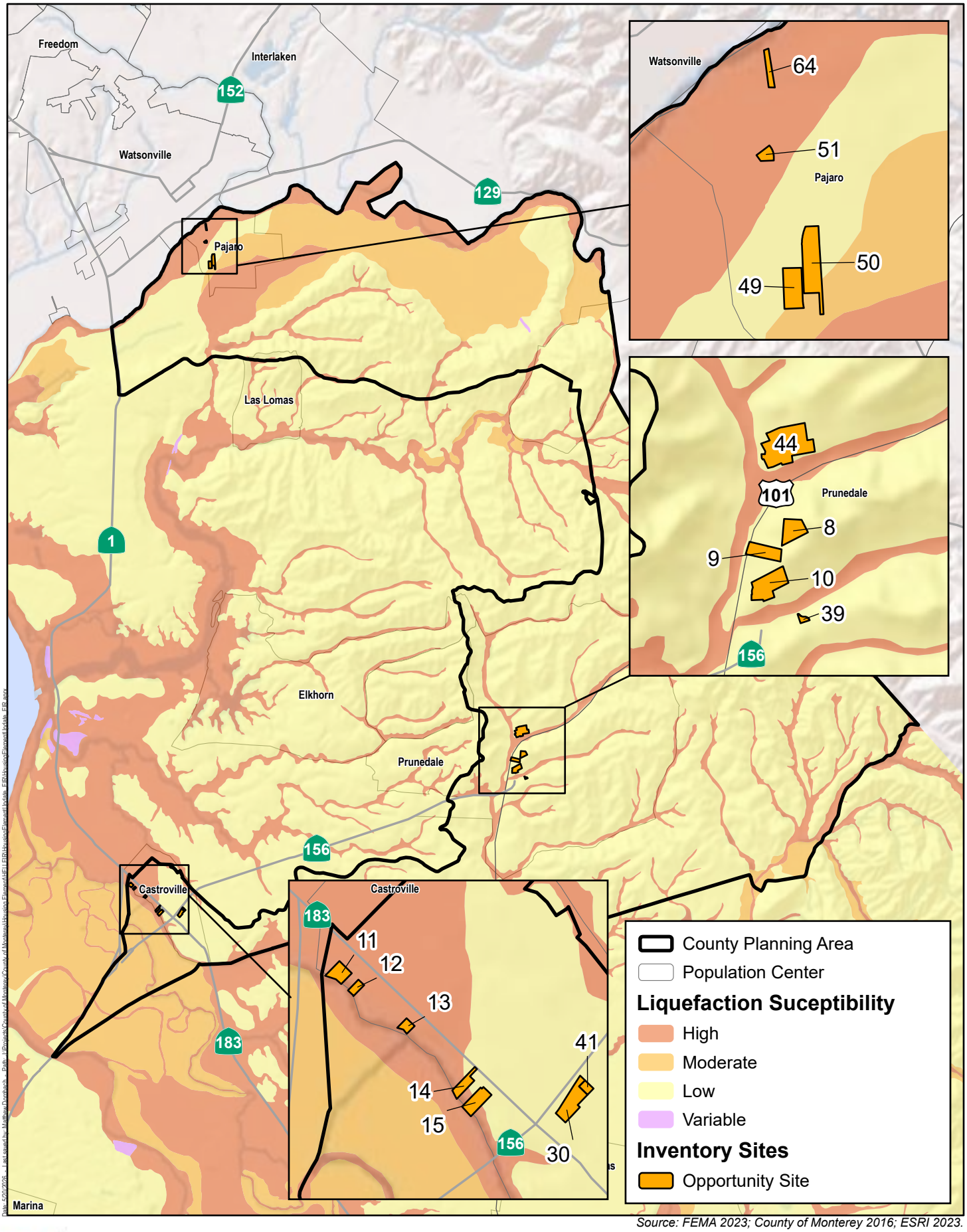
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**Figure 7-2g**

Liquefaction Susceptibility - North County Land Use Plan (Coastal)

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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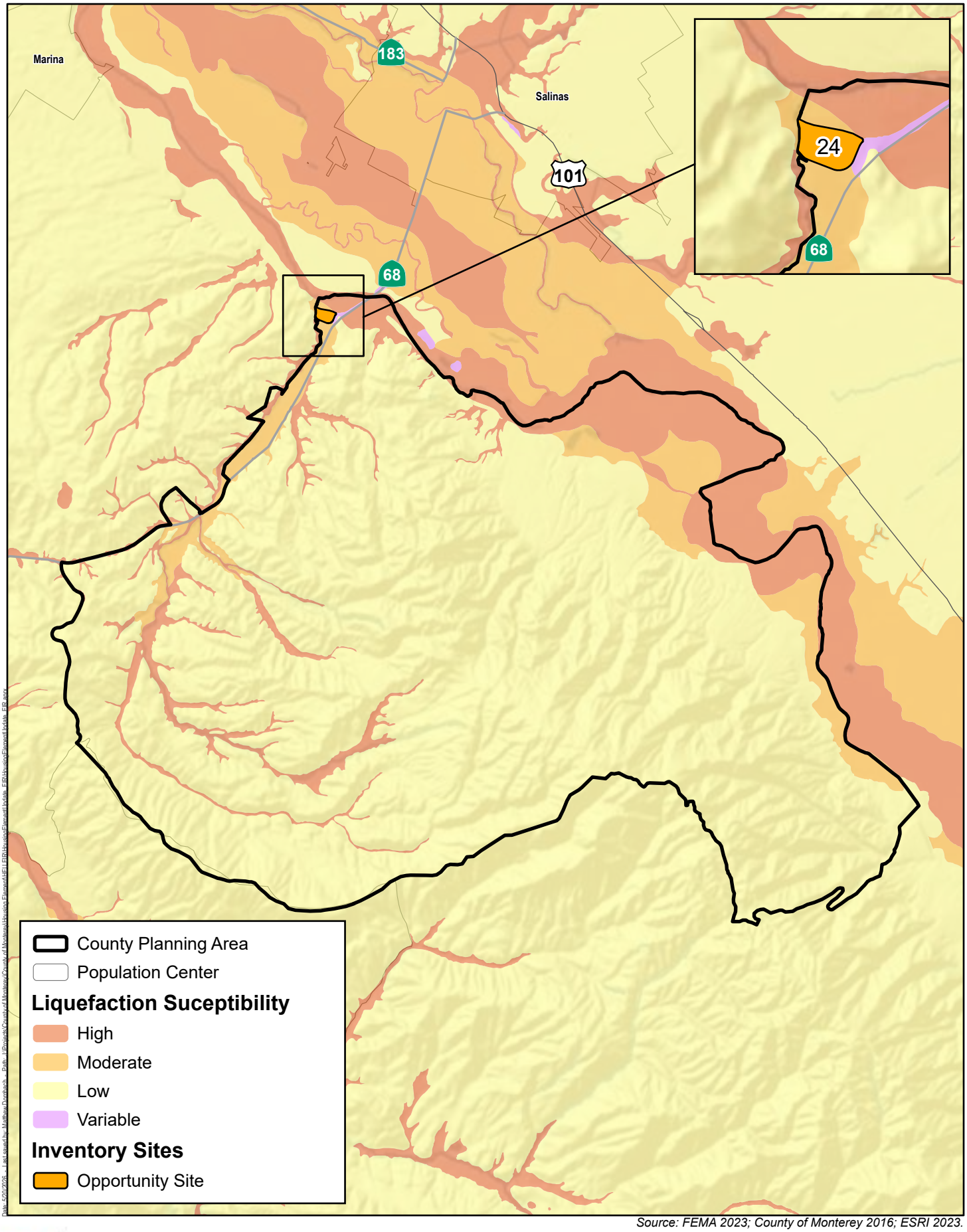
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**Figure 7-2h**

Liquefaction Susceptibility - North County Area Plan (Inland)

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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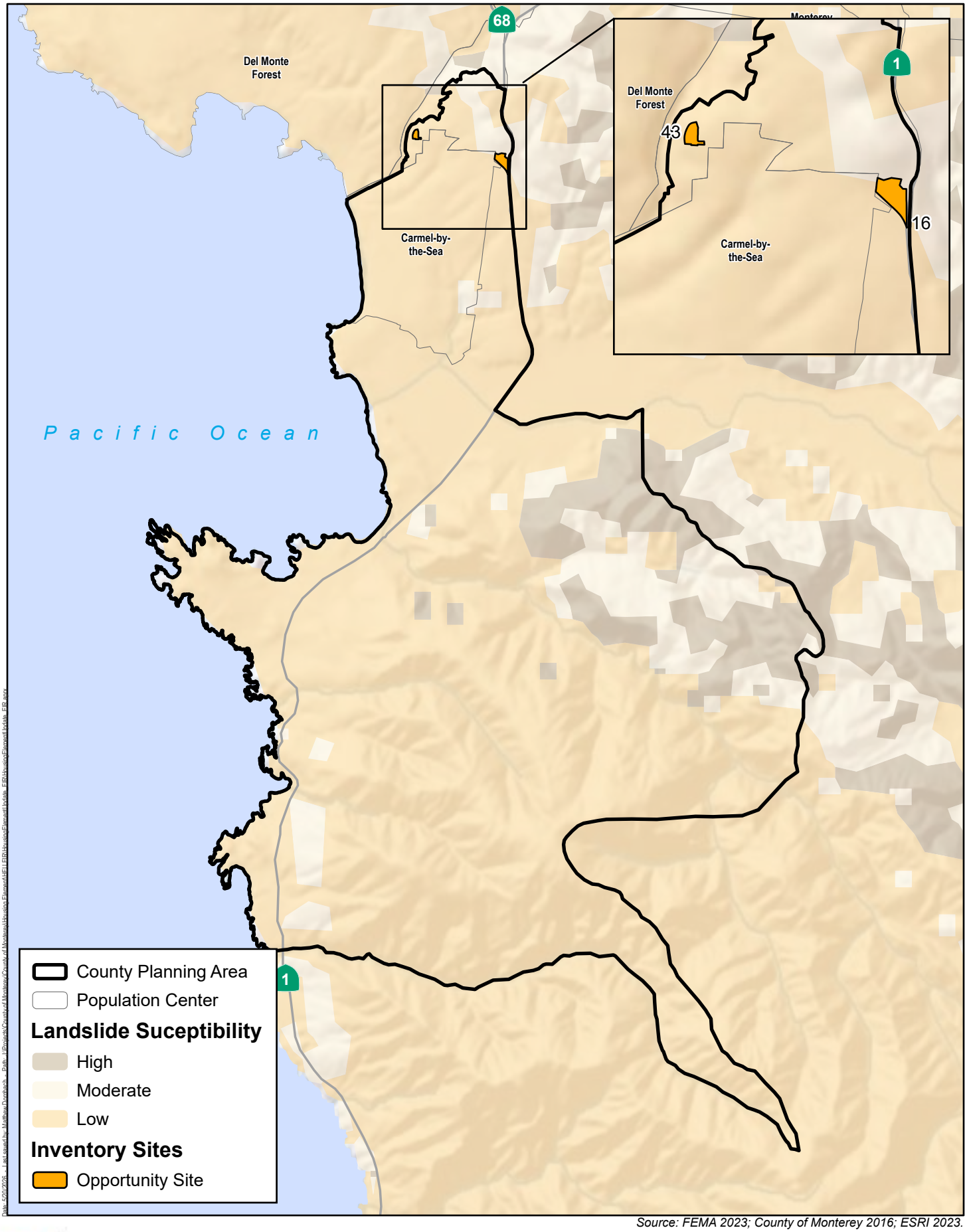
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Miles

**Figure 7-2i**

Liquefaction Susceptibility - Toro Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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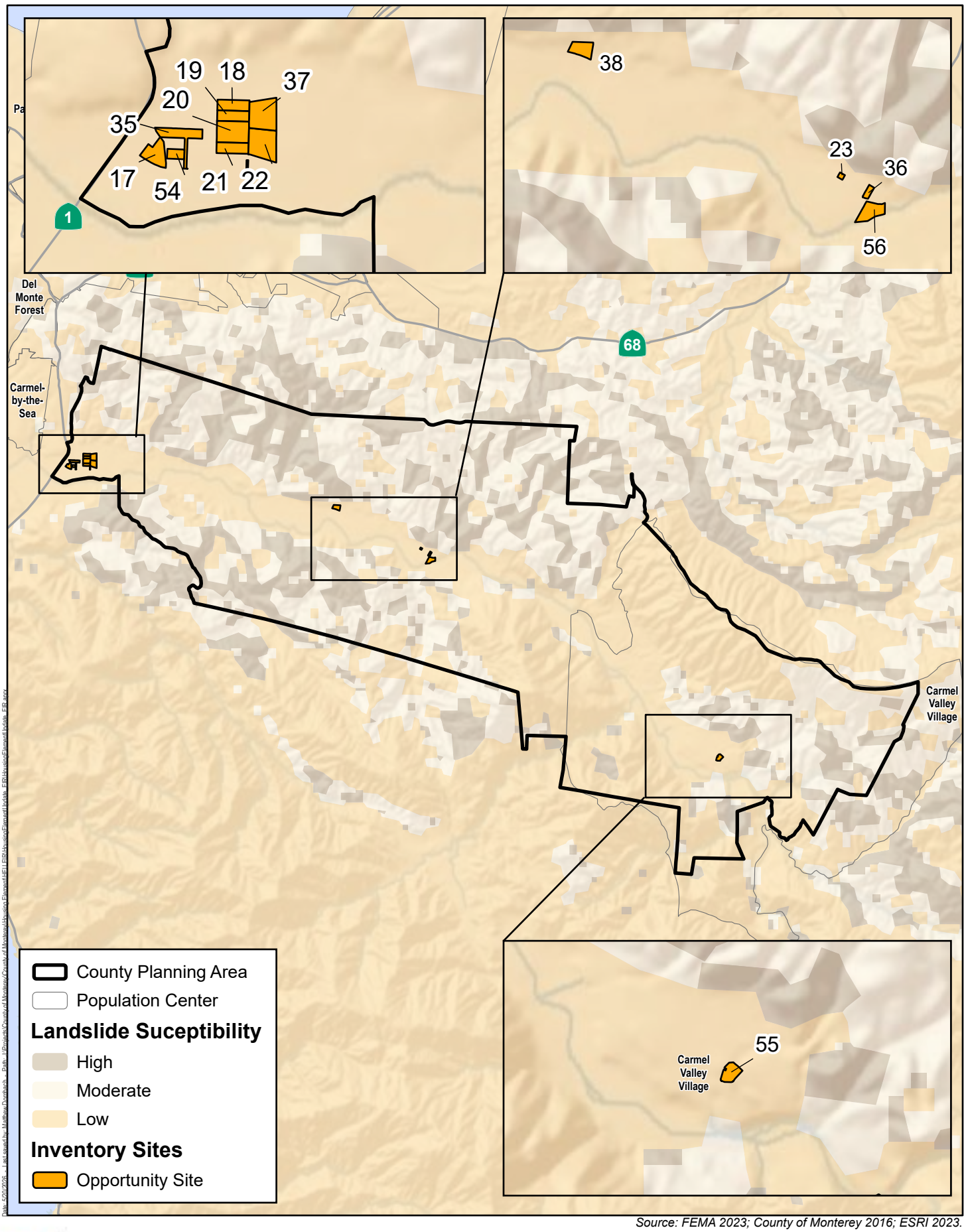
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**Figure 7-3a**

Landslide Susceptibility - Carmel Area Land Use Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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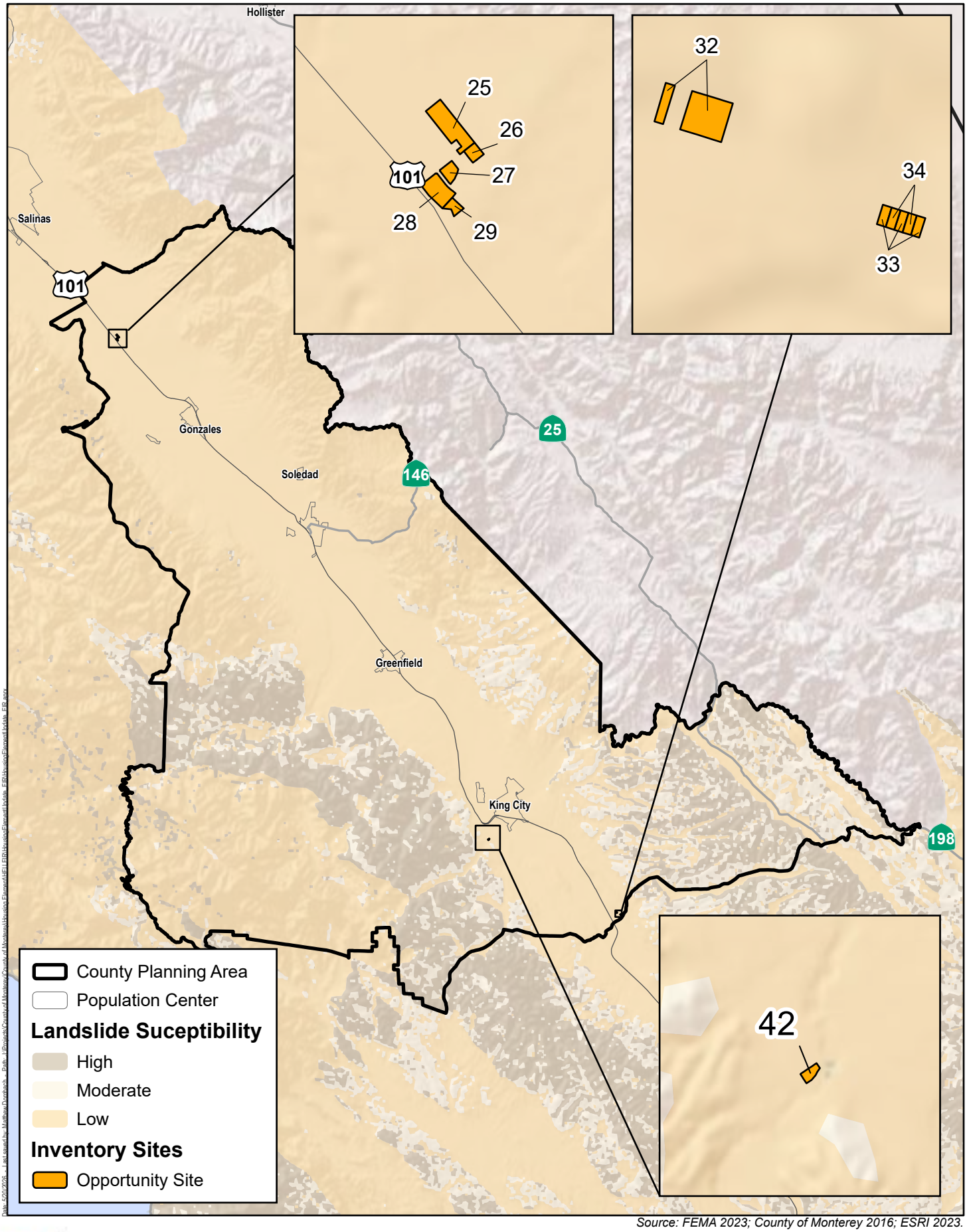
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**Figure 7-3b**

Landslide Susceptibility - Carmel Valley Master Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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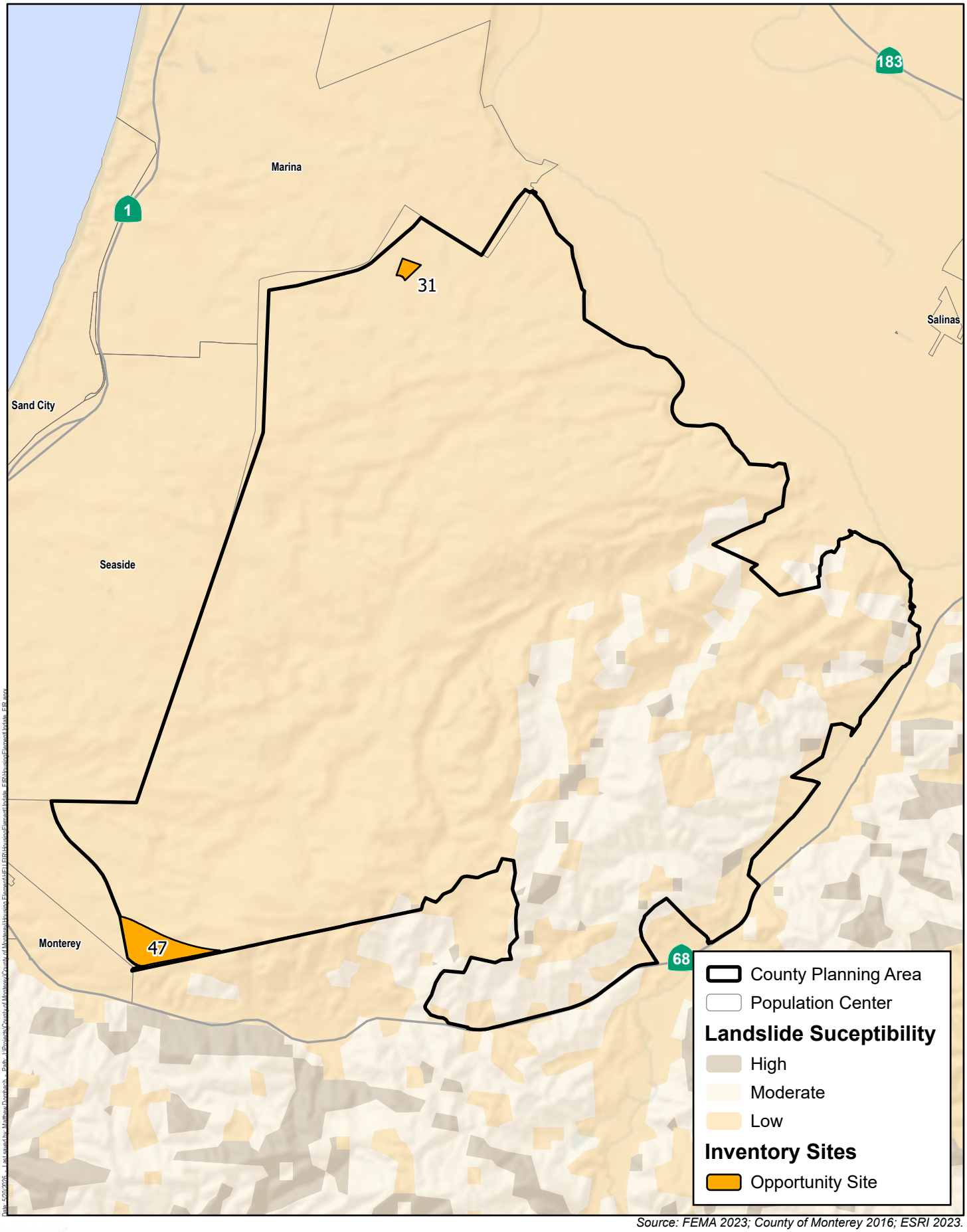
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**Figure 7-3c**

Landslide Susceptibility - Central Salinas Valley Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

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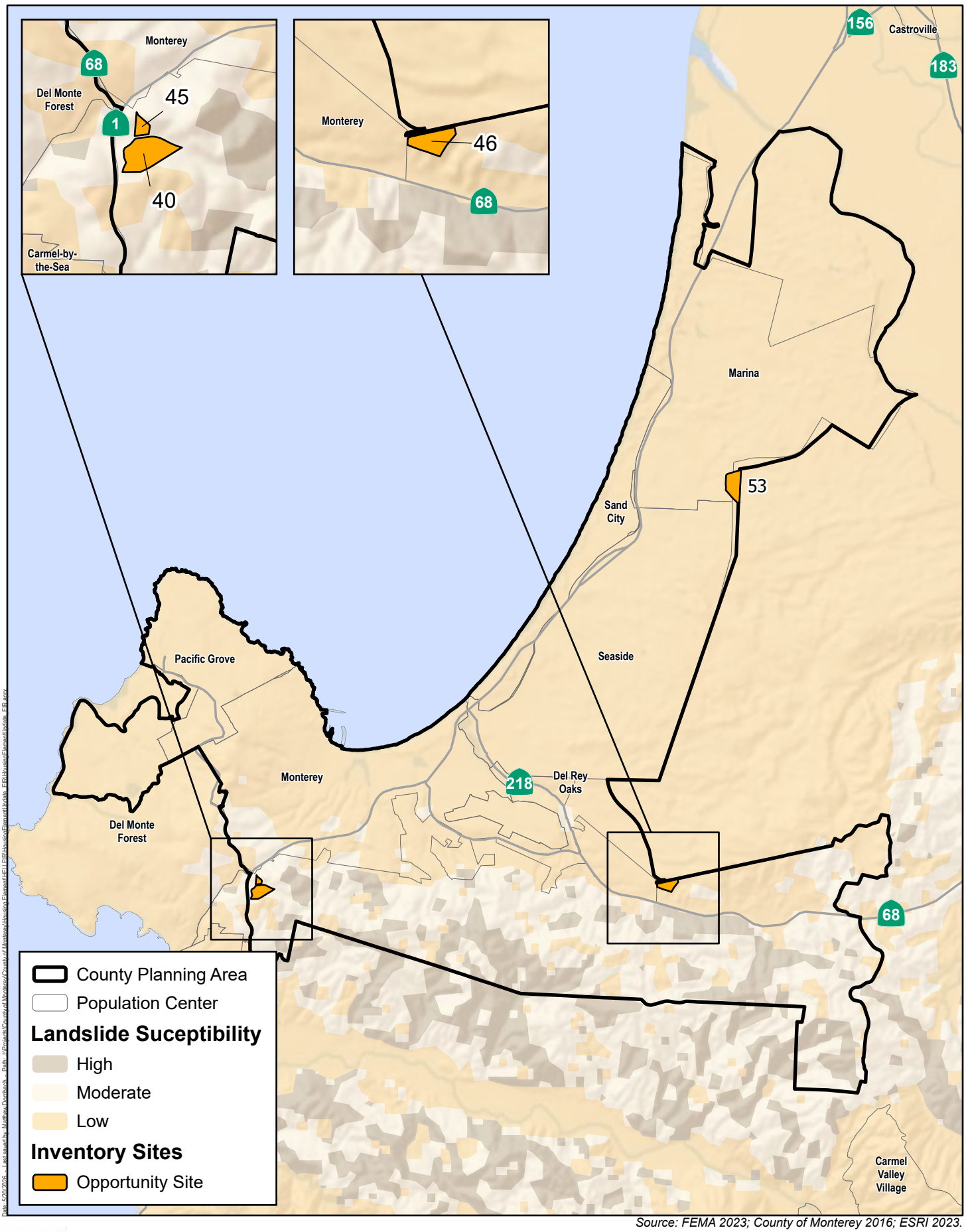
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Miles

**Figure 7-3d**

Landslide Susceptibility - Fort Ord Master Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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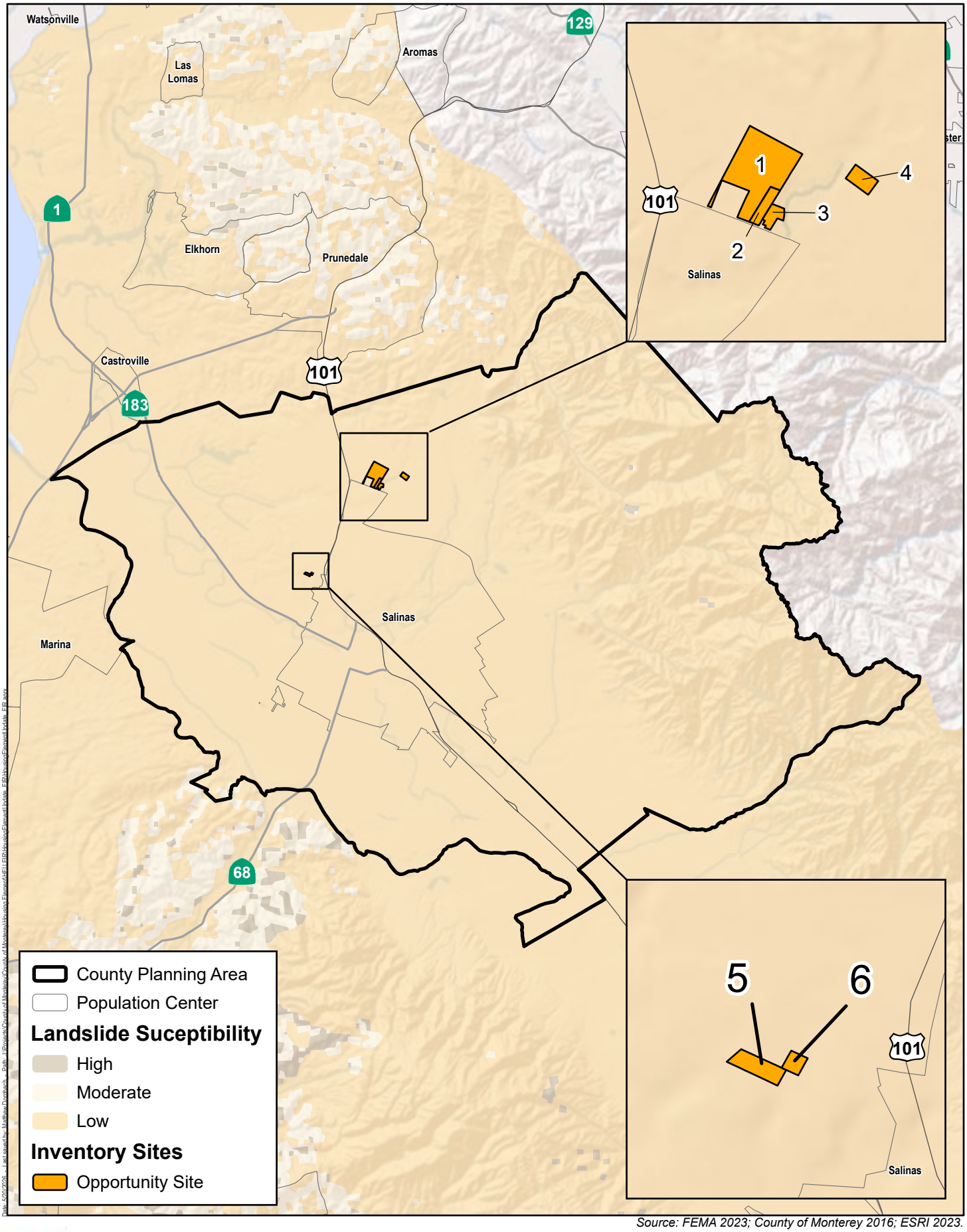
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Miles

**Figure 7-3e**

Landslide Susceptibility - Greater Monterey Peninsula Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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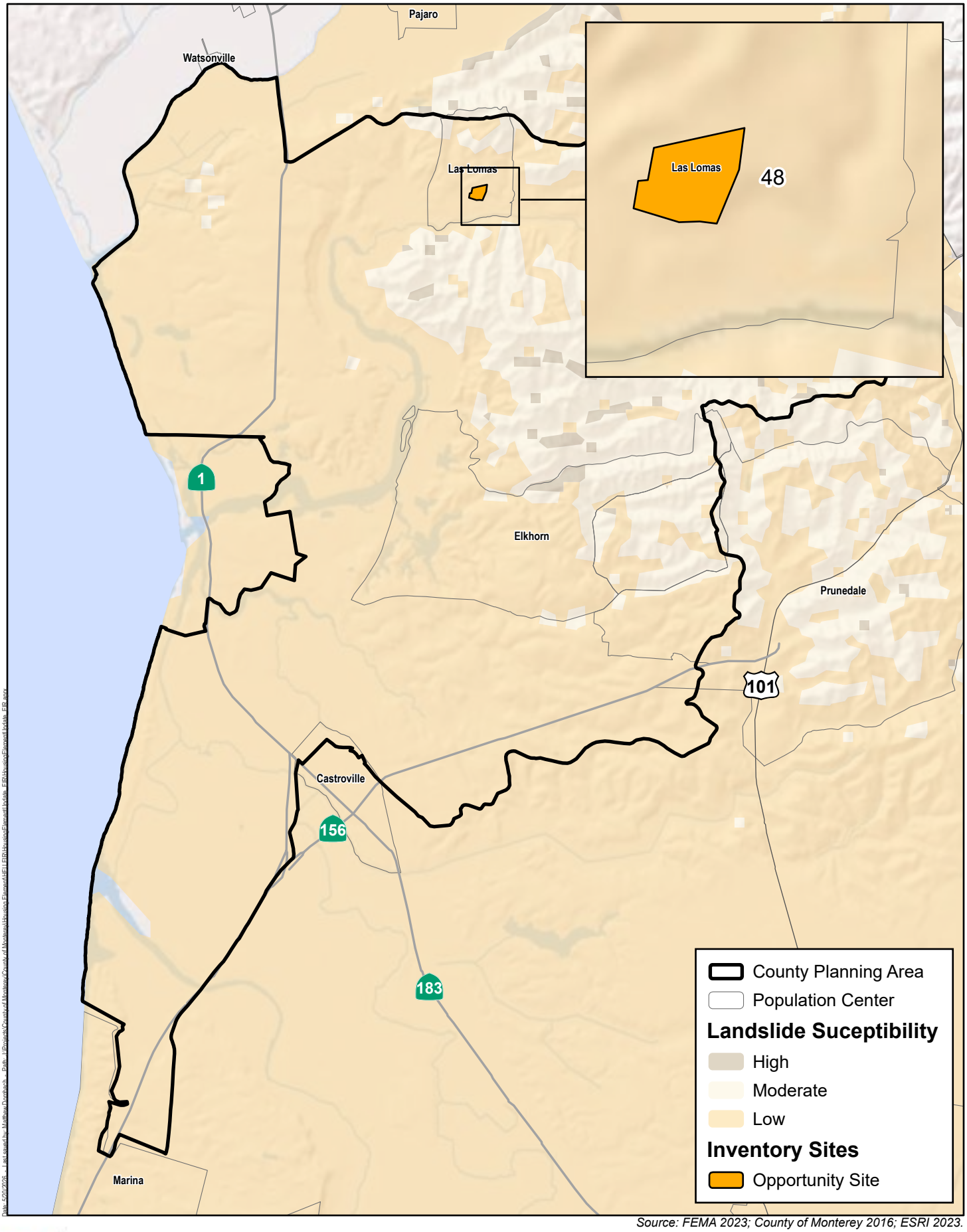
0 0.25 0.5

Miles

**Figure 7-3f**

Landslide Susceptibility - Greater Salinas Area Plan

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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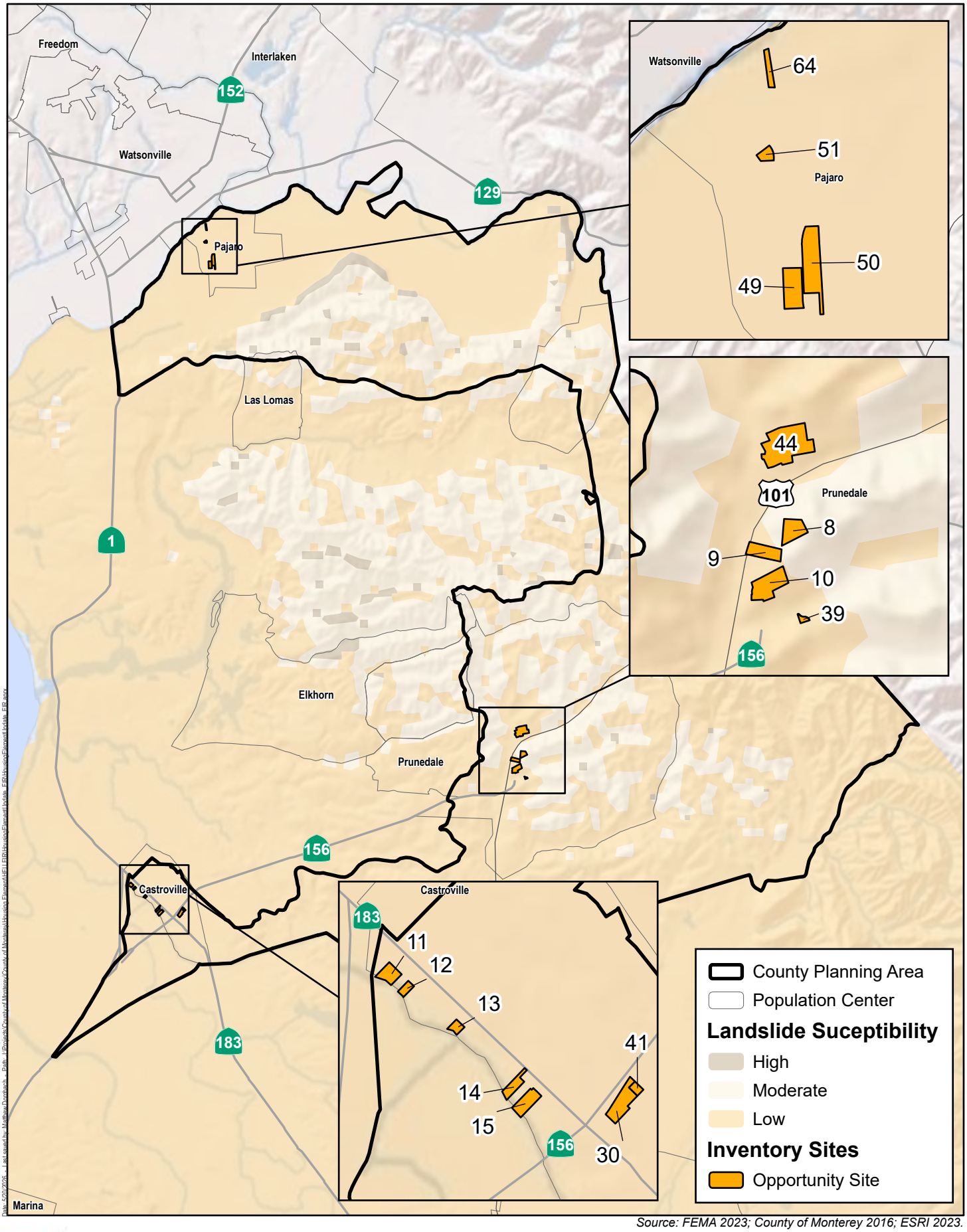
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Miles

**Figure 7-3g**

Landslide Susceptibility - North County Land Use Plan (Coastal)

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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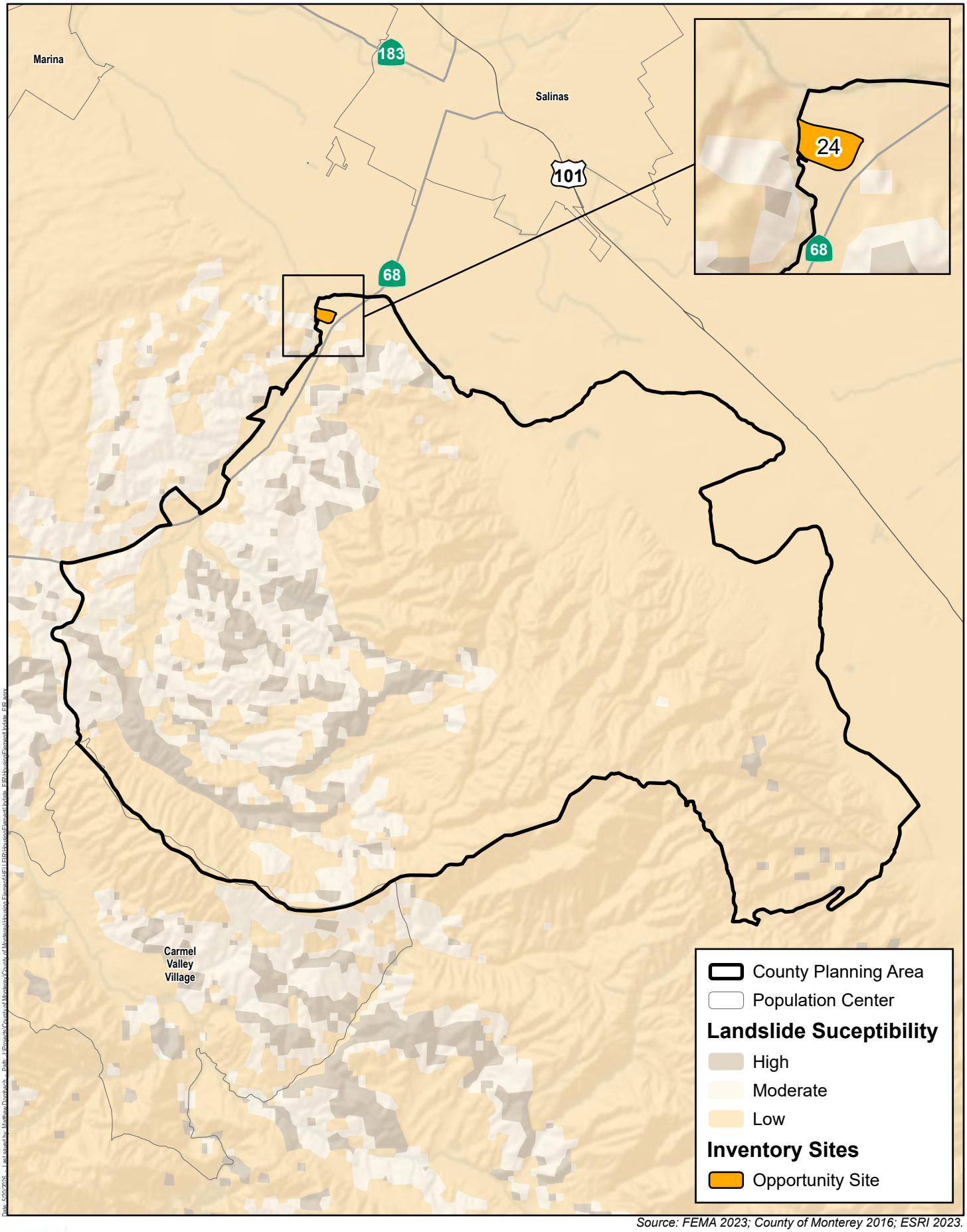
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Miles

**Figure 7-3h**

Landslide Susceptibility - North County Area Plan (Inland)

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*Source: FEMA 2023; County of Monterey 2016; ESRI 2023.*

Harris & Associates

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0 0.25 0.5

Miles

**Figure 7-3i**

Landslide Susceptibility - Toro Area Plan

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# Chapter 8 List of Preparers

This chapter lists the lead agency and consultants who prepared this Program Environmental Impact Report (PEIR) and technical reports.

## 8.1 Environmental Impact Report Preparation

### 8.1.1 Lead Agency

#### County of Monterey

Craig Spencer, Director of Housing and Community Development

Kelly L. Donlon, Chief Assistant County Counsel

Robert I. Brayer, Deputy County Counsel

Melanie Beretti, AICP, Chief of Planning

Sarah Wikle, Principal Planner

### 8.1.2 Consultants

#### Harris & Associates

Darin Neufeld, AICP, Senior Director

William Halligan, Esq., Senior Director/Senior Environmental Counsel

Elizabeth Kim, Senior Project Manager

Sydnie Margallo, LEED GA, Senior Environmental Planner

Andrew Talbert, AICP, Senior Planner

Sharon Toland, AICP, Senior Air Quality, Greenhouse Gas, and Noise Specialist

Kelsey Hawkins, PMP, Environmental Analyst

Emily Mastrelli, Director of Natural Resources

Katie Deodat, Senior Aquatic Biologist and Permitting Specialist

Donna Beddow, RPA, Senior Archaeologist

Alexis Bueno, Project Manager

Lindsey Messner, Senior Technical Editor

Leona Vander Molen, Technical Editor

Randy Deodat, GISP, GIS Analyst

### Kimley Horn

Ayberk Kocatepe, PhD. PTP, Senior Transportation Engineer

Asher Cipinko, Planning Analyst

Frederik Venter, PE, Senior Vice President

Michael Schmitt, AICP CTP, PTP, RSP

## 8.2 Technical Reports

### 8.2.1 Air Quality Technical Memorandum – Harris & Associates

Sharon Toland, AICP, Senior Air Quality and Greenhouse Gas Specialist

Kelsey Hawkins, PMP, Air Quality and Greenhouse Gas Analyst

### 8.2.2 Biological Resources Technical Report – Harris & Associates

Emily Mastrelli, Director of Natural Resources

Katie Deodat, Senior Aquatic Biologist and Permitting Specialist

Erika Eidson, Biology Manager/Principal Biologist

### 8.2.3 Cultural Resources Technical Report – Harris & Associates

Donna Beddow, RPA, Senior Archaeologist

### 8.2.4 Fuel Use Worksheet – Harris & Associates

Sharon Toland, AICP, Senior Air Quality and Greenhouse Gas Specialist

### 8.2.5 Greenhouse Gas Emissions Technical Memorandum – Harris & Associates

Sharon Toland, AICP, Senior Air Quality and Greenhouse Gas Specialist

Kelsey Hawkins, PMP, Air Quality and Greenhouse Gas Analyst

### 8.2.6 Noise Technical Report – Harris & Associates

Sharon Toland, AICP, Senior Noise Specialist

Kelsey Hawkins, PMP, Noise Analyst

### 8.2.7 Vehicle Miles Traveled Memorandum – Kimley Horn

Ayberk Kocatepe, PhD. PTP, Senior Transportation Engineer

Asher Cipinko, Planning Analyst

Frederik Venter, PE, Senior Vice President

Michael Schmitt, AICP CTP, PTP, RSP

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None.

## Chapter 1: Introduction

None.

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None.

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DRAFT

# Program Environmental Impact Report Appendices

## County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update

**July 2026**

Prepared for:

**County of Monterey**
**168 West Alisal Street, 3rd Floor**
**Salinas, California 93901**

Prepared by:

**60 W. Alisal Street, Suite 200, 2nd Floor**
**Salinas, California 93901**

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# Appendix A. NOP and NOP Comments

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# Appendix B. Proposed Amendments to Plans and Policies

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# Appendix C. Draft By-Right Housing Ordinance

**(includes draft Zoning Clearance Ordinance as an attachment)**

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# Appendix D. Draft Monterey County Model Objective Design Standards

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# Appendix E. Example CEQA Guidelines Section 15183 Exemption Checklist

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# Appendix F. Air Quality Technical Memorandum

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# Appendix G. Biological Resources Technical Report

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# Appendix H. Cultural Resources Technical Report

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# Appendix I. Fuel Use Worksheet

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# Appendix J. GHG Technical Memorandum

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# Appendix K. Noise Technical Report

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# Appendix L. VMT Memorandum

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# Appendix M. Evacuation Educational Materials

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# COUNTY OF MONTEREY

## HOUSING AND COMMUNITY DEVELOPMENT

## CRAIG W. SPENCER, DIRECTOR

1441 Schilling Place, South 2nd Floor
Salinas, California 93901-4527
(831) 755-5025
co.monterey.ca.us


# NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT AND NOTICE OF A SCOPING MEETING

**PROJECT TITLE: County of Monterey Sixth Cycle Housing Element (2023-2031) Project**

**PROJECT LOCATION: Monterey County (Unincorporated Countywide)**

**PUBLIC NOTICE**: Notice is hereby given that the County of Monterey ("County") is seeking written comments on the Notice of Preparation ("NOP") of a Program Environmental Impact Report ("PEIR") for the County of Monterey Sixth Cycle Housing Element (2023-2031) Project ("Project") in accordance with the California Environmental Quality Act ("CEQA"). The 30-day public review period will begin on October 21, 2024, and end November 19, 2024. **All comments must be received no later than November 20, 2024.** The County is soliciting public and agency input on the scope and content of the environmental information to be included in the PEIR. The project description, location, and potential environmental effects of the Project are summarized, with additional details provided in the attached Environmental Scoping Supplement.

**PROJECT DESCRIPTION: County of Monterey General Plan Sixth Cycle Housing Element (2023-2031) update and associated General Plan amendments, rezone, and various approvals to implement the housing element and comply with state law.**

The County of Monterey, as the Lead Agency under CEQA, has determined that the Project, as described below, will require the preparation of a PEIR in compliance with CEQA. In accordance with California Code of Regulations, Title 14, Chapter 3 ("CEQA Guidelines") Section 15082, the County has issued this NOP to serve as a public notice of a PEIR to provide responsible agencies, trustee agencies, and other interested parties with information describing the Project and its potential environmental effects, and to solicit comments and suggestions regarding the scope and content of the PEIR to be prepared.

The Project involves amending the County of Monterey General Plan to update the Housing Element for the Sixth Cycle 2023-2031 planning period ("HEU6"), as well as amending other components of the General Plan, including the Circulation Element, Conservation and Open Space Element, Land Use Element, Public Services Element, Carmel Valley Master Plan ("CVMP"),

Central Salinas Valley Area Plan ("CSVAP"), Fort Ord Master Plan ("FOMP"), Greater Monterey Peninsula Area Plan ("GMPAP"), Greater Salinas Area Plan ("GSAP"), North County Area Plan ("NCAP"), Toro Area Plan ("TAP"); and to Local Coastal Program ("LCP") components, including the Carmel Area Land Use Plan ("CALUP") and North County Land Use Plan ("NCLUP"), amendments to the Monterey County Zoning Code (Title 20 Coastal Zone and Title 21 Inland Areas), and other approvals as necessary to implement the HEU6 and comply with state law.[1]

The draft HEU6 establishes programs, policies, and actions to further the goal of meeting the existing and projected housing needs for residents of all income levels throughout the unincorporated areas of Monterey County. The HEU6 explains processes by which the County proposes to accommodate the Regional Housing Needs Allocation ("RHNA") assigned to the County through the year 2031. The required RHNA assigned for unincorporated Monterey County for the Sixth Cycle totals 3,326 units over the 8-year planning period (2023-2031). The RHNA is assigned to the County by the Association of Monterey Bay Area Governments ("AMBAG") under the oversight of the California Housing and Community Development Department.

Comments from agencies and the public regarding the scope and content of the environmental information is considered prior to the preparation of the PEIR. Agency and public comments should, at a minimum, identify significant environmental issues, reasonable alternatives, and/or mitigation measures that should be considered for inclusion in the PEIR. In compliance with CEQA Guidelines Sections 15060(d) and 15082, the County will not be preparing an initial study and will begin work directly on the Draft PEIR.

**LEAD AGENCY: County of Monterey Housing and Community Development Department**

**NOP AND ENVIRONMENTAL SCOPING SUPPLEMENT AVAILABLE:** The County has made a copy of the NOP and the Environmental Scoping Supplement available for review at various locations throughout the County.

- County of Monterey Housing and Community Development Department
  1441 Schilling Place, 2nd Floor South, Salinas, CA 93901
  (831) 755-5025
- Castroville Branch - Andy Ausonio Library - Monterey County Free Libraries
  11160 Speegle St., Castroville, CA 95012
- King City Branch - Monterey County Free Libraries
  402 Broadway St., King City, CA 93930
- Carmel Valley Branch – Monterey County Free Libraries
  65 W. Carmel Valley Rd.

[1] The PEIR is intended to apply to all listed project approvals as well as to any other approvals necessary or desirable to implement the Project. The County's Safety Element is being updated and a new Environmental Justice Element is being prepared pursuant to Government Code Section 65302(g) and 65302(h), respectively. The Safety Element Update and new Environmental Justice Element are a separate project with separate environmental review.

- Marina Branch – Monterey County Free Libraries
  190 Seaside Cir, Marina, CA 93933

Or

www.countyofmonterey.gov/GeneralPlanUpdates

The NOP and Environmental Scoping Supplement is available in a CD for purchase from the County of Monterey County Housing and Community Development Department at the above address.

**PUBLIC REVIEW PERIOD: October 21, 2024, through November 20, 2024**

**POTENTIAL ENVIRONMENTAL EFFECTS:** In accordance with Section 15082 of the CEQA Guidelines, the County of Monterey has prepared this NOP to provide agencies, organizations, and interested parties with information describing the Project and its potential environmental effects. Pursuant to CEQA Guidelines Section 15060(d), the Project may result in significant environmental impacts in the following areas: **Agricultural and Forestry Resources; Air Quality; Biological Resources; Cultural Resources; Energy; Geology and Soils; Greenhouse Gas Emissions; Hazards & Hazardous Materials; Hydrology/Water Quality; Land Use and Planning; Noise; Public Services; Transportation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire.**

**SCOPING MEETING**: Pursuant to California Public Resources Code Section 21083.9 and CEQA Guidelines Section 15082(c)(1), the Lead Agency will conduct a public scoping meeting for the purpose of soliciting written comments from interested parties requesting notice, responsible agencies, agencies with jurisdiction by law, trustee agencies, transportation agencies, and involved federal agencies, as to the appropriate scope and content of the PEIR.

**The public scoping meeting will be held on Thursday, November 7, 2024, at 6:00 PM.** The meeting will be in **virtual format only**. The scoping meeting will provide an opportunity to disseminate information, identify environmental issues, and discuss the scope of review to be included in the PEIR. County staff and environmental consultants will be available during this meeting.

The County encourages all interested individuals and organizations to attend this meeting. No decisions about the Project will be made at the Public Scoping Meeting.

**Join Zoom Meeting**
https://montereycty.zoom.us/j/94189045104

Dial by your location
+1 213 338 8477 US (Los Angeles)
+1 669 219 2599 US (San Jose)
+1 669 900 6833 US (San Jose)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)

Meeting ID: 941 8904 5104

**TO SUBMIT COMMENTS**: The County welcomes your comments during the public review period regarding the proposed scope of the Draft PEIR. All comments must be received by **November 20, 2024**. You may submit your comments in hard copy to:

County of Monterey Housing and Community Development Department
Attn: Jaime Scott Guthrie, AICP, Senior Planner
1441 Schilling Place, 2nd Floor South
Salinas, California 93901

The County also accepts comments electronically via e-mail, and requests following these instructions to ensure that the County has received your comments. To submit your comments by e-mail, please send a complete document including all attachments to:

CEQAcomments@CountyofMonterey.gov

Any e-mailed document should contain the name of the person or entity submitting the comments and contact information such as phone number, mailing address and/or e-mail address and include any and all attachments referenced in the e-mail and include **"CEQA for HEU6" in the subject line**. If you do not wish to send a follow-up hard copy, then please send a second e-mail requesting confirmation of receipt of comments with enough information to confirm that the entire document was received. If you do not receive e-mail confirmation of receipt of comments, then please submit a hard copy of your comments to the name and address listed above to ensure inclusion in the environmental record or contact the County to ensure the County has received your comments.

Responsible and Trustee agencies are requested to indicate their statutory responsibilities in connection with this Project when responding. A Draft PEIR incorporating public input will be prepared and distributed for the public to review and comment.

**TO RECEIVE PUBLIC NOTICES OR ADDITIONAL INFORMATION:** In addition to a scoping meeting, public hearings will be held during the public review period for the Draft PEIR being prepared for this Project. The hearings will be held at a time and place to be specified by legal advertisement in a local newspaper of general circulation.

If you would like to be notified of the hearings or would like additional information, please send an email to GeneralPlanUpdates@countyofmonterey.gov or call Jaime Scott Guthrie, AICP, Advanced Planning at (831) 796-6414 or send your request by mail to the name and address above.

Please note that if you are already on the public email distribution list to receive notices regarding housing element update (HEU6), you will automatically be included in public notices for the Draft PEIR.

This Notice was published in the **Monterey County Weekly** and distributed for public review on **October 21, 2024**.

# Environmental Scoping Supplement to the NOP
# November 7, 2024 – Online Public Meeting

## County of Monterey Draft General Plan Housing Element Sixth Cycle (2023-2031) Update

### Project Description

The County of Monterey ("County") Draft General Plan Housing Element Sixth Cycle (2023-2031) Update ("HEU6") is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County's Regional Housing Needs Allocation ("RHNA") of 3,326 housing units distributed across four Income levels (1,070 Very Low, 700 Low, 420 Moderate, and 1,136 Above Moderate). Along with facilitating the County's RHNA, the update to the HEU6 must identify and analyze significant disparities in access to opportunity (AB 686 – Affirmatively Furthering Fair Housing ("AFFH") Act). The AFFH Act requires that a jurisdiction's housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

The County includes the capacity for at least 6,233 units, comprising opportunity sites (4,479 units), pipeline sites (1,484 units), and accessory dwelling units (ADUs, 270 units). Table 1, Capacity Determination, summarizes the County's assessment that sufficient capacity exists to accommodate the RHNA across all income levels. Table 2, Affordability Income Ranges, shows the affordability income categories, income ranges, area median income ("AMI") for the County. The existing and planned zoning, the vacant/non-vacant status, and total unit capacity assumed for each of the Opportunity Sites are summarized in Table 3, Opportunity Sites Summary. Opportunity Sites are sites for which the County has a reasonable expectation that housing development could occur, though no proposals or entitlements have been submitted. Pipeline Sites are sites where housing has been proposed and/or entitled, and where development is expected to receive a building permit or certificate of occupancy. Although the 56 Opportunity Sites have not yet been approved by the California Housing and Community Development Department ("CA HCD"), these sites represent a conservative scenario for environmental review purpose. No new sites would be added though some sites may be eliminated.

**Table 1. Capacity Determination**

| | VLI | LI | Mod. | Above Mod. | Total |
|---|---|---|---|---|---|
| RHNA | 1,070 | 700 | 420 | 1,136 | 3,326 |
| **Alternative Methods to Meet the RHNA (Credits)** | | | | | |
| Entitled or Proposed Projects | 257 | 206 | 205 | 816 | 1,484 |
| Accessory Dwelling Unit Potential | 0 | 9 | 0 | 261 | 270 |
| Subtotal | 257 | 215 | 205 | 1,077 | 1,754 |

**Table 1. Capacity Determination**

| | VLI | LI | Mod. | Above Mod. | Total |
|---|---|---|---|---|---|
| **Opportunity Sites** | | | | | |
| Total from Opportunity Sites | 1,561 | 1,063 | 731 | 1,124 | 4,479 |
| **Total (Credits & Site Inventory)** | **1,818** | **1,278** | **936** | **2,201** | **6,233** |
| Surplus/(Shortfall) | 748 | 578 | 516 | 1,065 | 2,907 |
| **TOTAL RNHA BUFFER** | **70%** | **83%** | **123%** | | |

**Note**: VLI = very low income, LI = low income, Mod = moderate income

**Table 2. Affordability Income Ranges**

| Income Category | % Median | Income Range | | RHNA | % of Total |
|---|---|---|---|---|---|
| | | Minimum | Maximum | | |
| Extremely Low/Very Low | 0-50% | $0 | $60,200 | 1,070 | 32% |
| Low | 50-80% | $60,200 | $96,350 | 700 | 21% |
| Moderate | 80-120% | $96,350 | $120,500 | 420 | 13% |
| Above Moderate | 120% | $120,500 | -- | 1,136 | 34% |
| Total | | | | 3,326 | 100% |
| 2023 CA HCD Income Limits, Monterey County, AMI = $100,400 | | | | | |

## Project Location

The HEU6 will apply to the entire geographic area located within the unincorporated boundaries of Monterey County. Monterey County covers more than 3,300 square miles. Figure 1, Regional Location, shows the boundaries of Monterey County within the Northern California region. The draft HEU6 includes 56 Opportunity Sites (Sites 1 through 51, 53 through 56, and 64) as listed in Table 2, Opportunity Sites Summary, representing 4,479 units. These are sites for which the County has reasonable expectation that development of housing would occur from implementation of the updated Housing Element. These sites are subject to change following review by CA HCD, other agencies, and the public. Opportunity Sites are identified in the following nine areas of the County: North County Inland Area Plan, North County Coastal Land Use Plan, Greater Salinas Valley Area Plan, Greater Monterey Peninsula Area Plan, Fort Ord Master Plan, Toro Area Plan, Carmel Valley Master Plan, Carmel Area Land Use Plan, and Central Salinas Valley Area Plan. Opportunity Sites are shown on Figures 2a through 2i.

**Table 3. Opportunity Sites Summary**

| Site No. | Assessor's Parcel Number(s) | Current Zoning | Planned Rezone | Vacant/ Non-Vacant | Total Capacity[1] |
|---|---|---|---|---|---|
| **North County Inland Area Plan Sites** | | | | | |
| 8 | 125-501-002 | LDR/2.5 | HDR/20 | Vacant | 68 |
| 9 | 125-171-029 | RDR/5 | HDR/20 | Vacant | 66 |
| 10 | 125-171-047 | LC | HDR/20 | Non-Vacant | 98 |
| 11 | 030-141-029 | Castroville Community Plan (MU-C) | HDR/20 | Vacant | 29 |
| 12 | 030-151-008 | Castroville Community Plan (MU-C) | HDR/20 | Vacant | 12 |
| 13 | 030-155-005 | Castroville Community Plan (MU-C) | HDR/20 | Non-Vacant | 13 |
| 14 | 030-171-001 | Castroville Community Plan (MU-C) | HDR/20 | Non-Vacant | 25 |
| 15 | 030-171-015 | Castroville Community Plan (MU-C) | HDR/20 | Vacant | 38 |
| 30 | 030-191-011 | Castroville Community Plan (MU-C) | HDR/20 | Non-Vacant | 53 |
| 39 | 125-171-055 | LDR/1 | HDR/20 | Vacant | 9 |
| 41 | 030-191-001 | Castroville Community Plan (MU-C) | HDR/20 | Vacant | 10 |
| 44 | 127-012-039 | LC | HDR/20 | Non-Vacant | 136 |
| 49 | 117-291-008 | HI | HDR/20 | Non-Vacant | 30 |
| 50 | 117-291-040 | HI | HDR/20 | Non-Vacant | 49 |
| 51 | 117-332-015, 117-332-014 | HC | Mixed-Use | Non-Vacant | 5 |
| 64 | 117-361-004 | LC | HDR/20 | Non-Vacant | 2 |
| **North County Coastal Land Use Plan Sites** | | | | | |
| 48 | 412-073-002 | MDR/4 (CZ) and CGC(CZ) [split zoned parcel] | HDR/20 (CZ) | Non-Vacant | 37 |
| **Greater Salinas Valley Area Plan Sites** | | | | | |
| 1 | 113-161-018 | F/40 | HDR/20 | Non-Vacant | 455 |
| 2 | 113-161-019 | F/40 | HDR/20 | Non-Vacant | 67 |
| 3 | 113-161-012 | MDR/5 | HDR/20 | Non-Vacant | 45 |
| 4 | 211-012-034 | HDR/B-6 | HDR/20 | Non-Vacant | 27 |

**Table 3. Opportunity Sites Summary**

| Site No. | Assessor's Parcel Number(s) | Current Zoning | Planned Rezone | Vacant/ Non-Vacant | Total Capacity[1] |
|---|---|---|---|---|---|
| 5 | 261-101-006 | MDR/4-A-UR | HDR/20 | Non-Vacant | 15 |
| 6 | 261-101-002 | MDR/4-A-UR | HDR/20 | Non-Vacant | 16 |
| **Greater Monterey Peninsula Area Plan Sites** | | | | | |
| 40 | 008-151-00200 | RDR/5.1-UR-D-S | HDR/20 | Vacant | 429 |
| 45 | 008-141-002, 008-141-014 | RDR/5.1-UR-D-S | HDR/20 | Non-Vacant | 48 |
| 46 | 173-071-008 | PQP-D-S | HDR/20 | Non-Vacant | 92 |
| 53 | 031-101-018 | C-R (Marina) | Mixed-Use (UC Regents) | Vacant | 476 |
| **Fort Ord Master Plan** | | | | | |
| 7 | 031-121-007, 175-021-004 | PQP-D-S | Mixed-Use (UC Regents) | Vacant | 932 |
| 31 | 031-101-016 | PQP-D-S | HDR/20 | Vacant | 131 |
| 47 | 031-131-006 | PQP-D-S | HDR/20 | Non-Vacant | 60 |
| **Toro Area Plan Site** | | | | | |
| 24 | 161-011-074 | F/40 | HDR/20 | Non-Vacant | 146 |
| **Carmel Valley Master Plan Sites** | | | | | |
| 17 | 009-562-015, 009-562-016, 009-562-002 | LC-D-S-RAZ | HDR/20 | Vacant | 34 |
| 18 | 015-021-026 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 23 |
| 19 | 015-021-025 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 23 |
| 20 | 015-021-015 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 86 |
| 21 | 015-021-021 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 22 |
| 22 | 015-021-004 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 105 |
| 23 | 169-235-009 through -012 | LC-D-S | HDR/20 | Vacant | 8 |
| 35 | 015-012-072 | VO-B-6-D-S-RAZ | HDR/20 | Non-Vacant | 63 |
| 36 | 169-231-002 through -006 | HC-D-S-RAZ | HDR/20 | Non-Vacant | 20 |
| 37 | 015-021-003 | LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 89 |
| 38 | 169-031-018 | PQP-D-S-RAZ | HDR/20 | Non-Vacant | 53 |
| 54 | 015-012-070 | VO-B-6-D-S-RAZ | HDR/20 | Non-Vacant | 24 |

**Table 3. Opportunity Sites Summary**

| Site No. | Assessor's Parcel Number(s) | Current Zoning | Planned Rezone | Vacant/ Non-Vacant | Total Capacity[1] |
|---|---|---|---|---|---|
| 55 | 187-442-010 through -012, 187-442-019 | VO-D-S-RAZ, 30-ft setback from CV Rd. per CV Village Devel. Criteria (3.1), and LDR/1-D-S-RAZ | HDR/20 | Non-Vacant | 23 |
| 56 | 169-131-025 | LDR/1-D-S-RAZ, LDR/B-6-D-S-RAZ, To be retained as one building site pursuant to CVMP Figure 2. | HDR/20 | Non-Vacant | 33 |
| **Carmel Area Land Use Plan Sites** | | | | | |
| 16 | 009-061-003 | MDR/2-D(CZ) | HDR/20(CZ) | Non-Vacant | 52 |
| 43 | 009-111-005 | MDR/2-D(CZ) | HDR/20(CZ) | Non-Vacant | 23 |
| **Central Salinas Valley Area Plan Sites** | | | | | |
| 25 | 145-151-001 | PQP | HDR/20 | Non-Vacant | 57 |
| 26 | 145-161-085 | HDR/10 | HDR/20 | Non-Vacant | 12 |
| 27 | 145-161-086 | HDR/10 | HDR/20 | Vacant | 14 |
| 28 | 145-161-087 | HDR/10 | HDR/20 | Vacant | 35 |
| 29 | 145-161-088 | HDR/10 | HDR/20 | Vacant | 10 |
| 32 | 231-024-005, 231-024-011, 231-024-010, 231-024-006, 231-024-007, 231-024-001 | HDR/5 | HDR/20 | Vacant | 16 |
| 33 | 231-038-014, 231-038-012, 231-038-010 | LDR/1 | HDR/20 | Vacant | 5 |
| 34 | 231-038-013, 231-038-011 | LDR/1 | HDR/20 | Vacant | 3 |
| 42 | 221-155-021 | HDR/8-UR | HDR/20 | Vacant | 27 |
| **Total Number of Opportunity Sites = 56 Sites** | | | | | |
| **Total Capacity = 4,479 Units** | | | | | |

**Note:**

[1] The determination of opportunity sites utilizes the proposed zoning changes and capacity expectations as described in the Draft Housing Element Sixth Cycle Update.

LDR = Low Density Residential, MDR = Medium Density Residential, HDR = High Density Residential,

RDR = Rural Density Residential, C = Commercial, LC = Light Commercial, HC = Heavy Commercial, MU = Mixed Use, HI = Heavy Industrial, CGC (CZ) = Coastal General Commercial, F = Farmlands, UR = Urban Reserve, D = Design Control, S = Site Plan Review, PQP = Public/Quasi-Public, RAZ = Residential Allocation, VO = Visitor Serving/Professional Office, B = Building Site

## Project Background

California law requires that a housing element be included in the general plan as one of the eight mandatory "elements," or chapters, which express the community's values, goals, and vision for the future. The County's Housing Element updates cover an eight-year planning period beginning December 31, 2023, and ending December 31, 2031 (the "Sixth Cycle" planning period) and accomplishes the following:

- Presents a comprehensive assessment of local housing conditions and lays out a series of goals, policies, and programs to assist the County in meeting the housing needs of current and future residents at all income levels in unincorporated Monterey County (UMC).
- Identifies and analyzes the UMC's existing and projected housing needs as calculated using the Association of Monterey Bay Area Governments (AMBAG) model for estimated population growth.
- Addresses numerous requirements resulting from a slate of new state housing laws designed to address factors contributing to the statewide housing shortage.
- Provides programs for the preservation, improvement, and development of housing, including how and where the UMC can accommodate its RHNA assessment assigned by AMBAG.

**ATTACHMENTS:** Figure 1: Regional Location

Figure 2a: Project Location – North County Inland Area Plan Sites

Figure 2b: Project Location – North County Coastal Land Use Plan Sites

Figure 2c: Project Location – Greater Salinas Area Plan Sites

Figure 2d: Project Location – Greater Monterey Peninsula Area Plan Sites

Figure 2e: Project Location – Fort Ord Master Plan Sites

Figure 2f: Project Location – Toro Area Plan Sites

Figure 2g: Project Location – Carmel Valley Master Plan Sites

Figure 2h: Project Location – Carmel Area Land Use Plan Sites

Figure 2i: Project Location – Central Salinas Valley Area Plan Sites

**Figure 1. Regional Location**

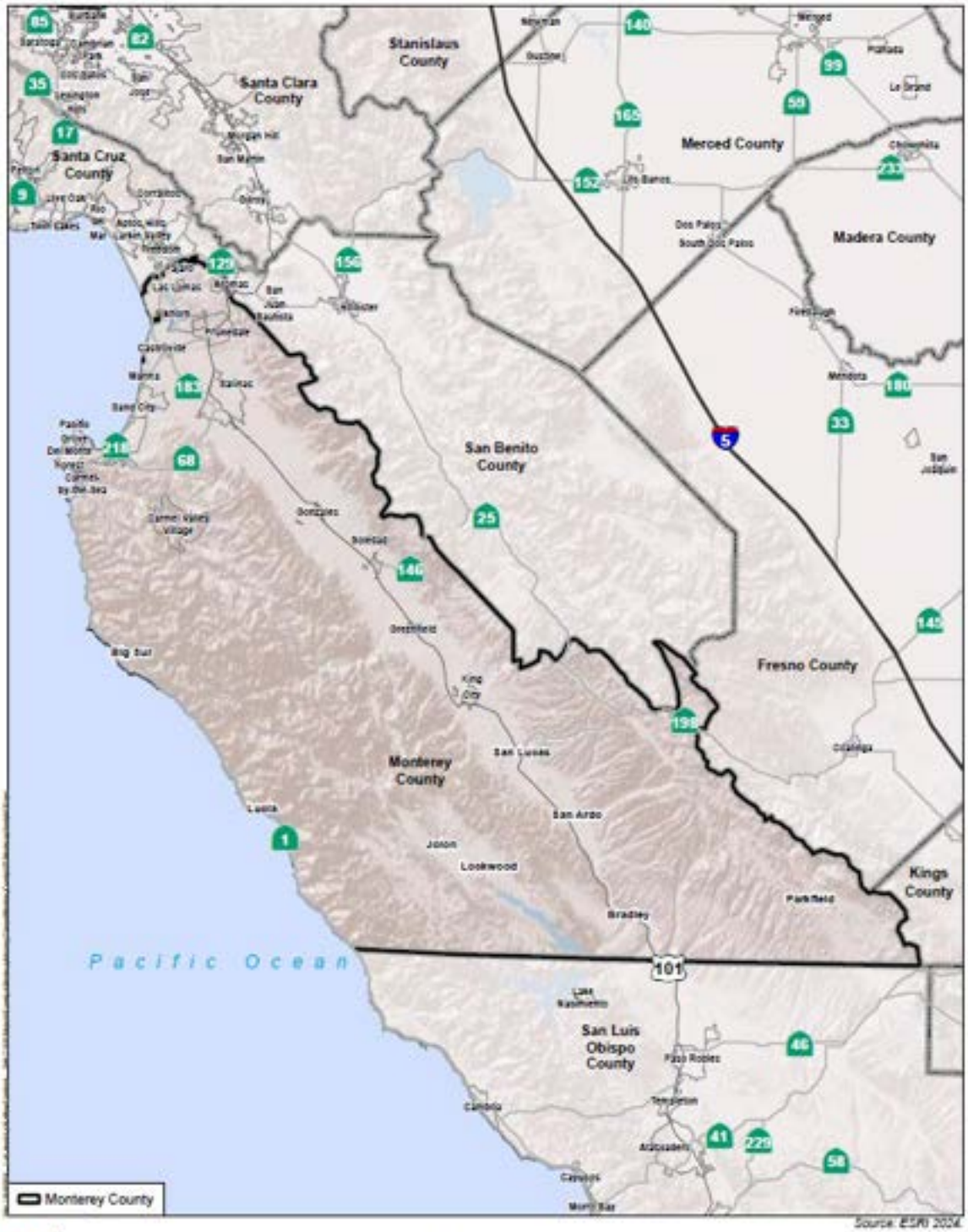


**Figure 2a: North County Inland Area Plan Sites**

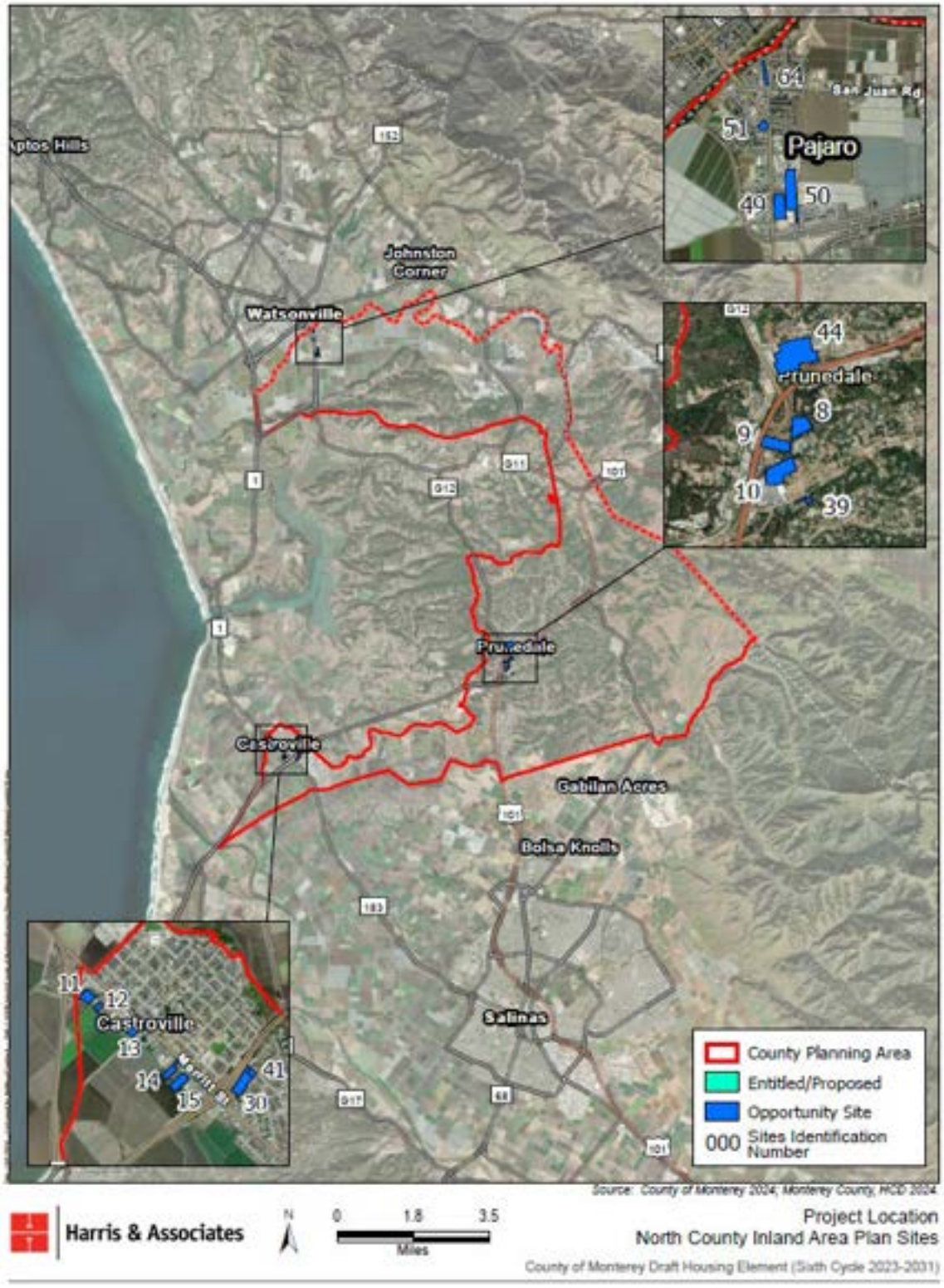


**Figure 2b: North County Coastal Land Use Plan Sites**

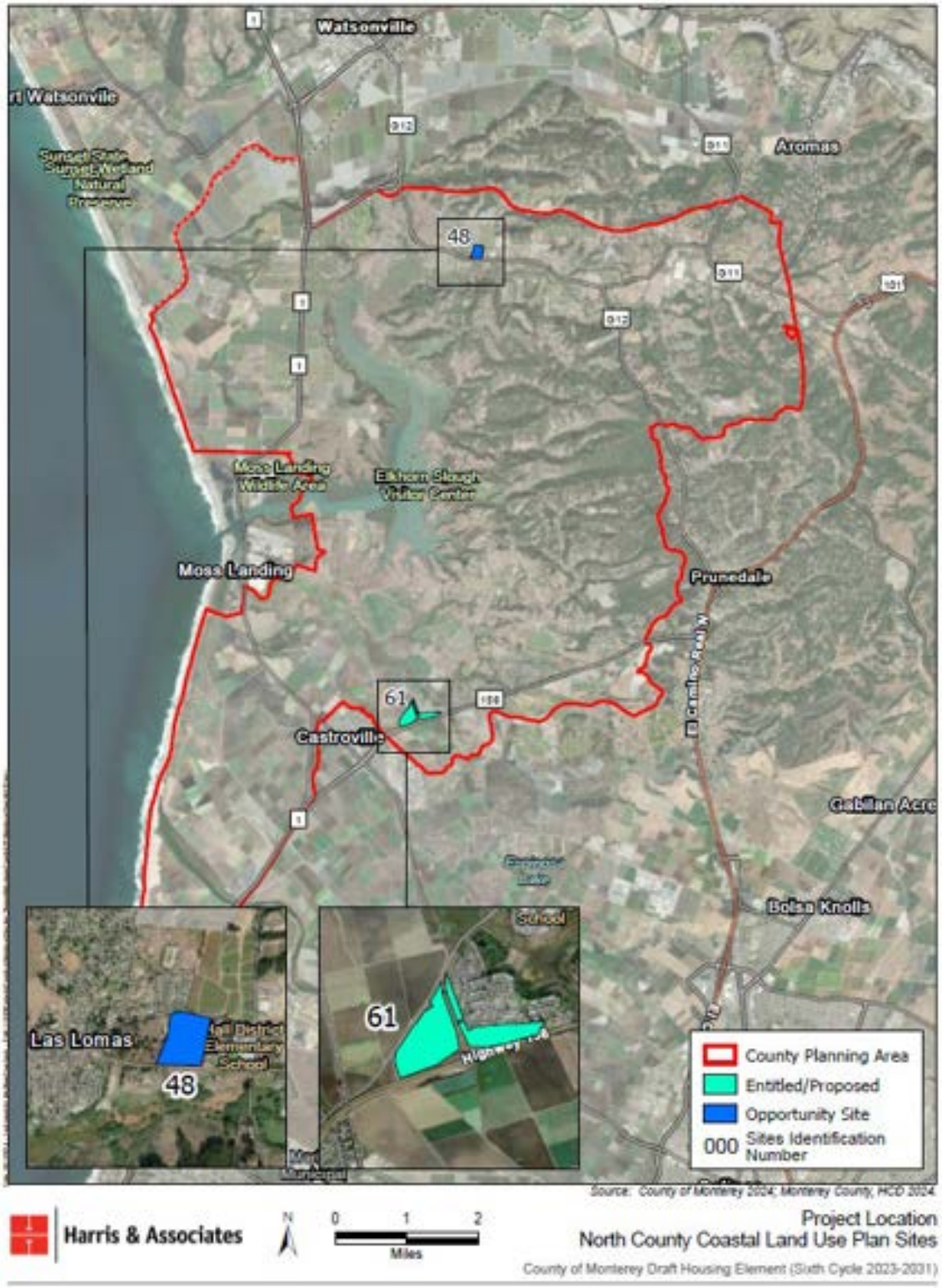


**Figure 2c: Greater Salinas Area Plan Sites**

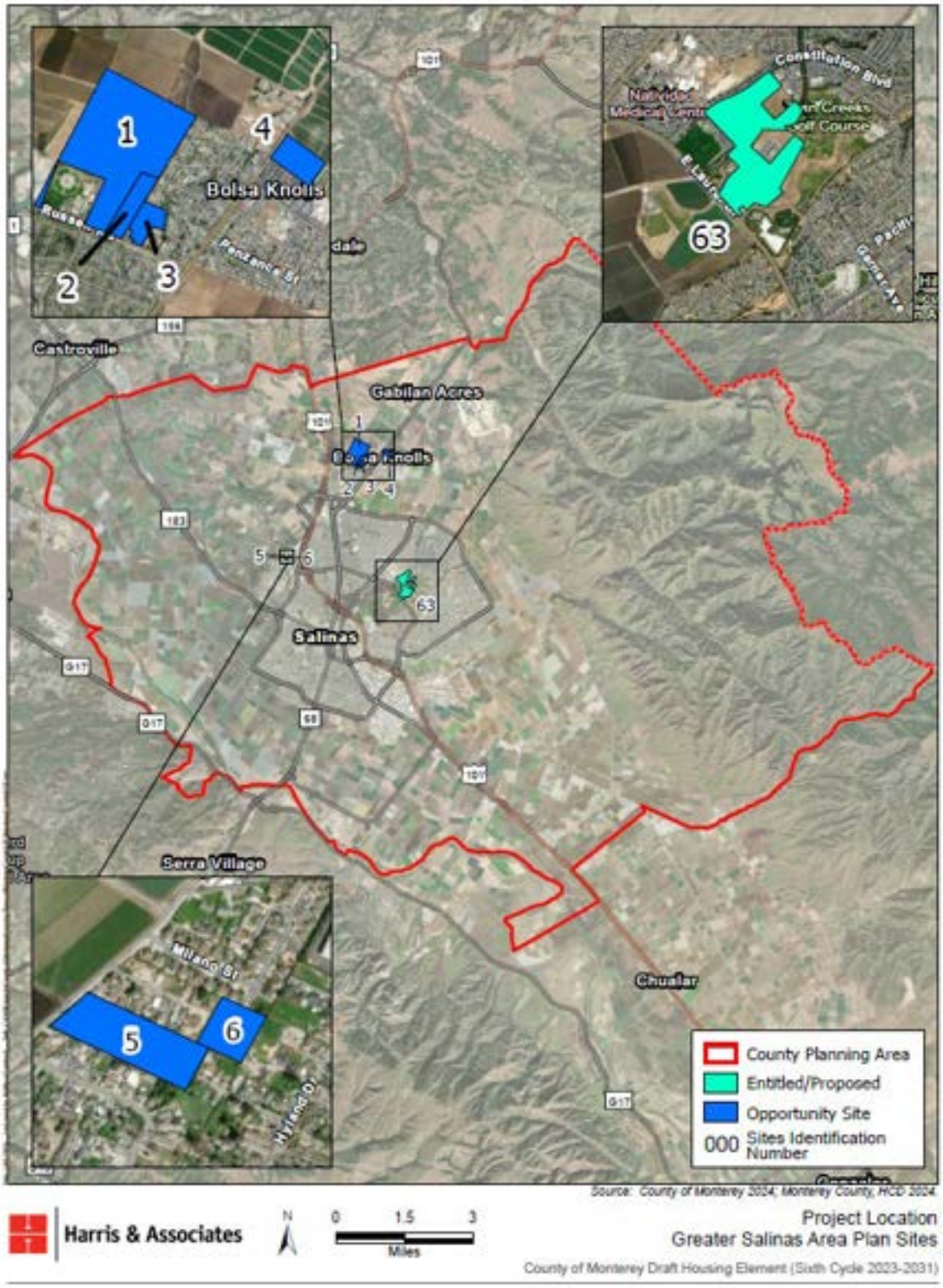


**Figure 2d: Greater Monterey Peninsula Area Plan Sites**



**Figure 2e: Fort Ord Master Plan Sites**

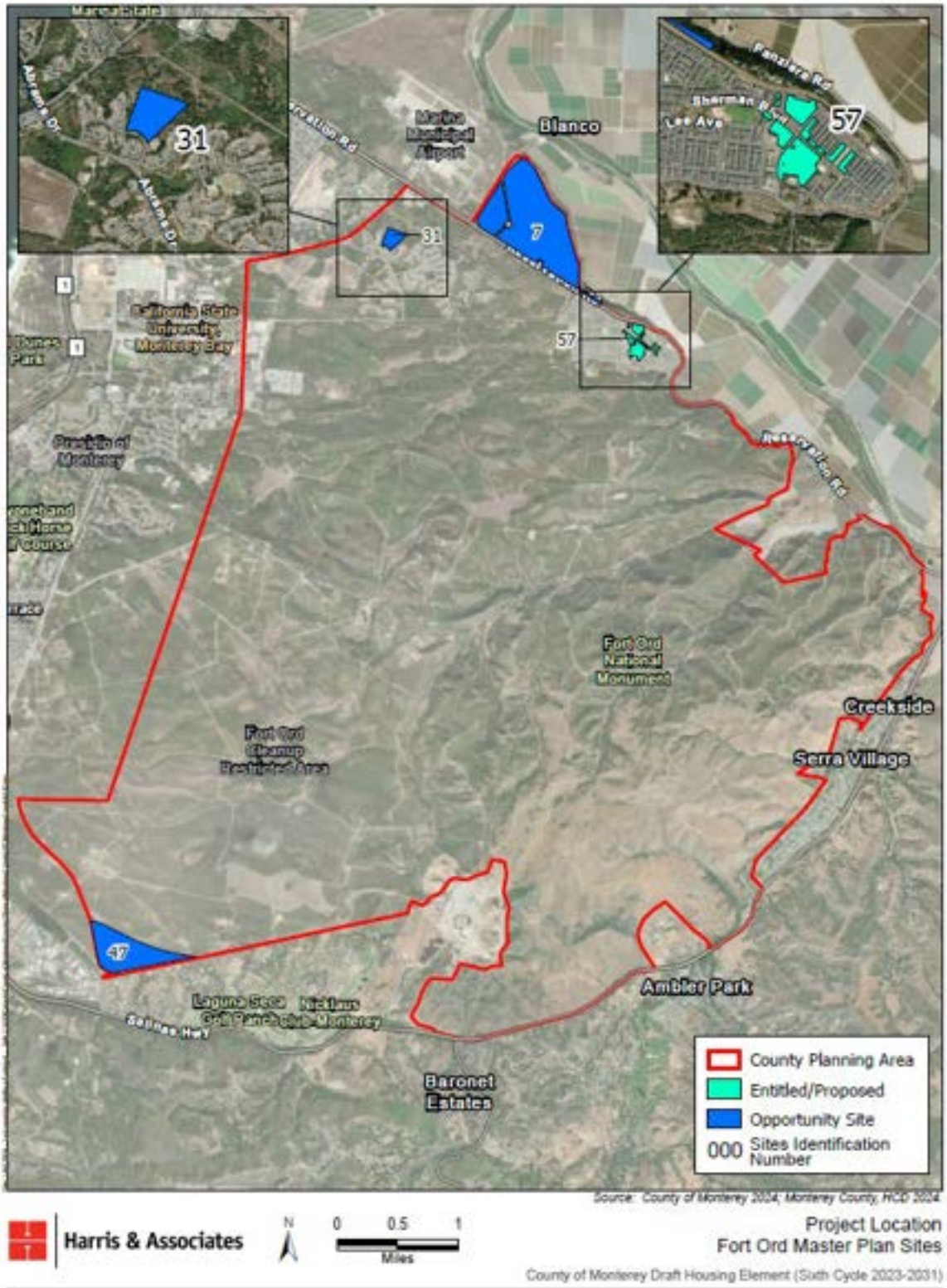


**Figure 2f: Toro Area Plan Sites**

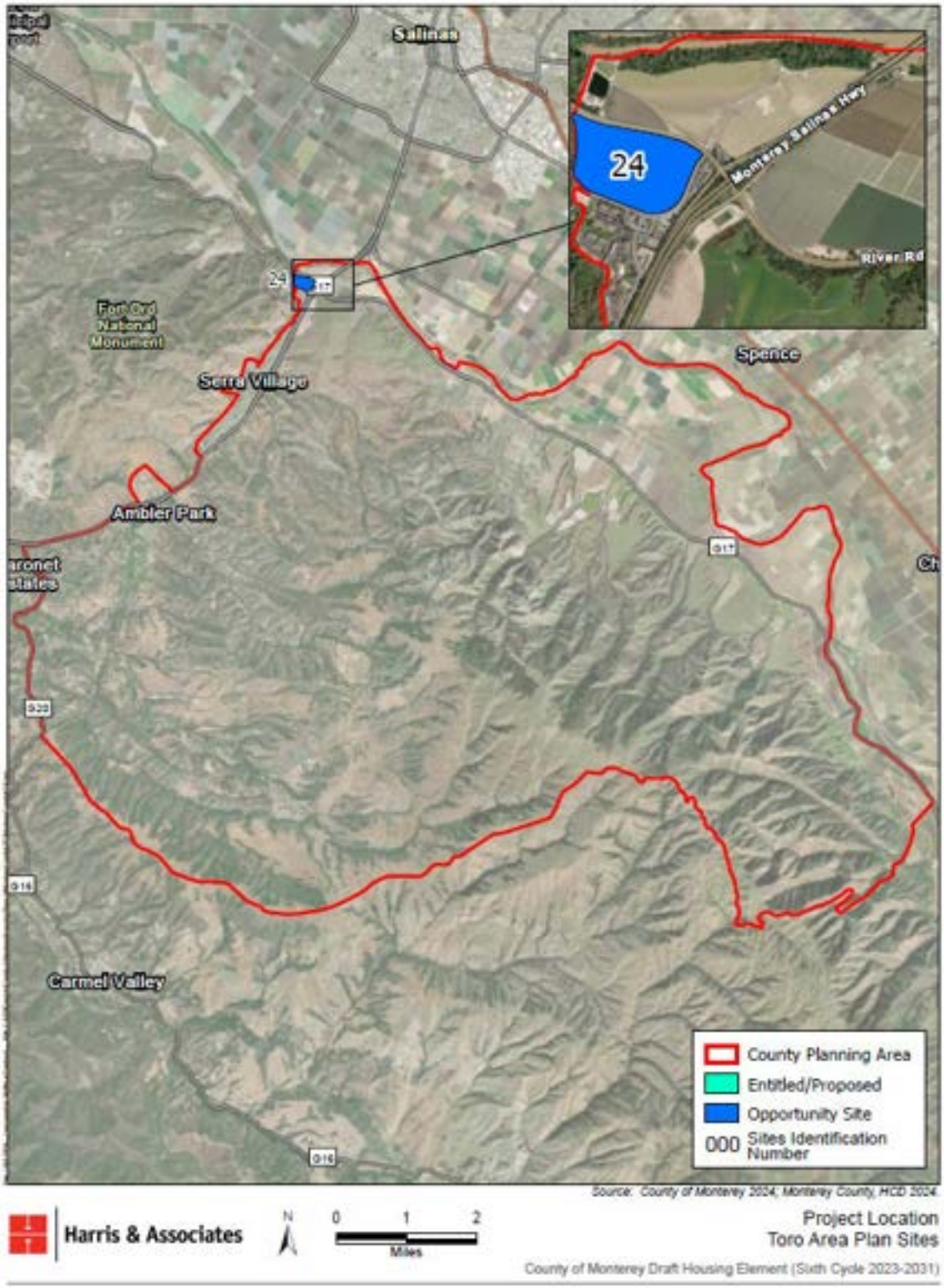


**Figure 2g: Carmel Valley Master Plan Sites**

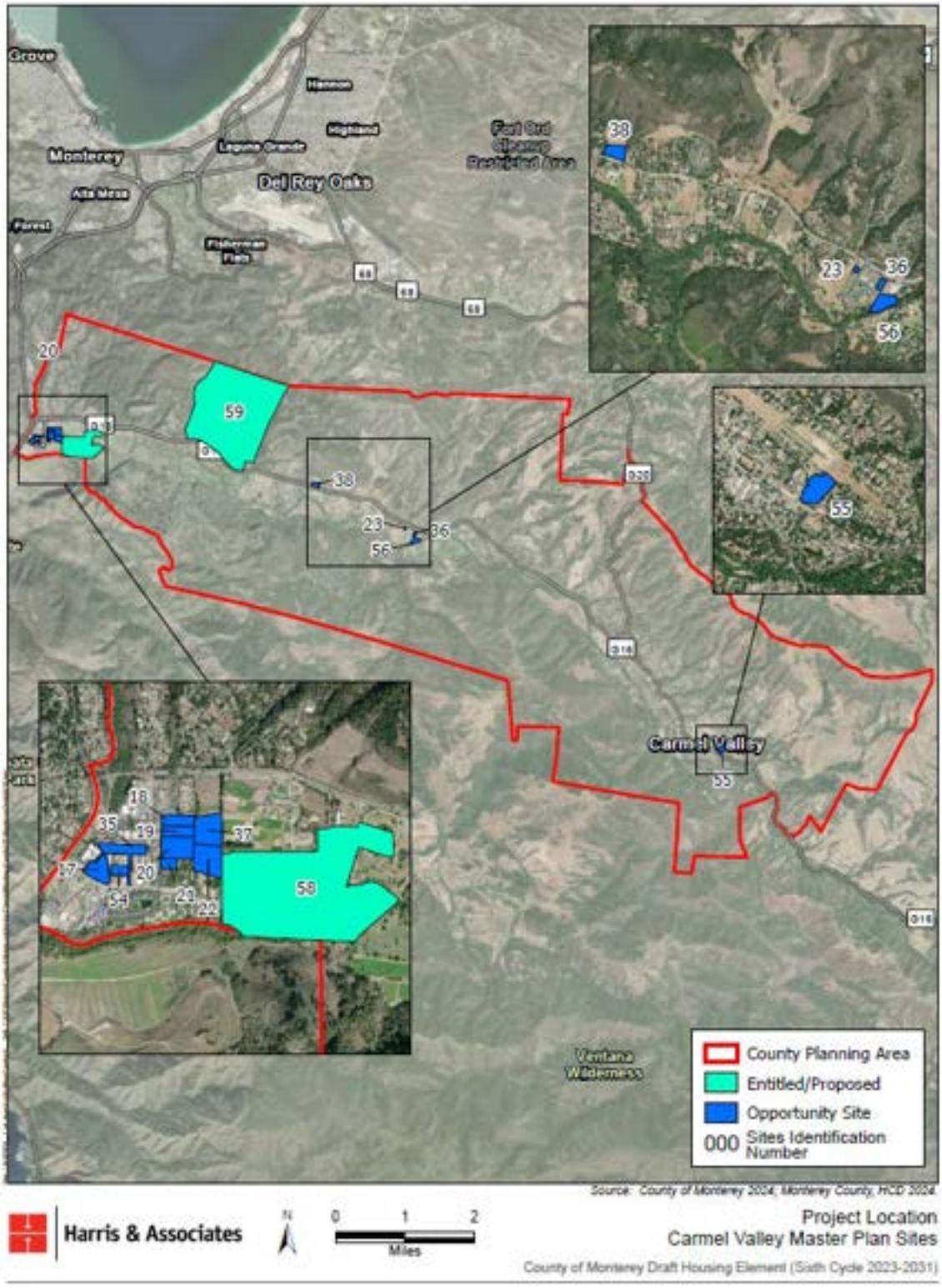
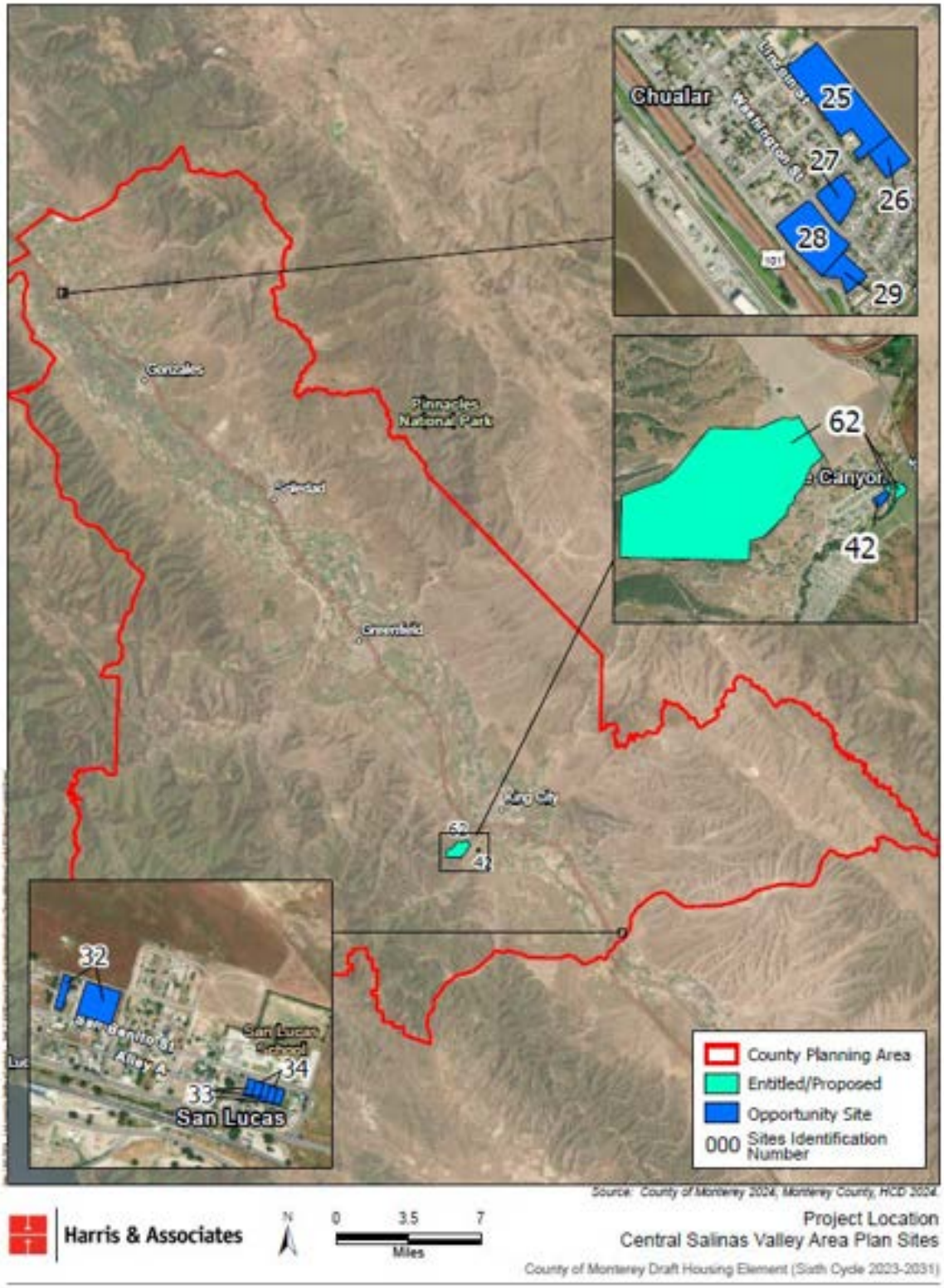


**Figure 2h: Carmel Area Land Use Plan Sites**



**Figure 2i: Central Salinas Valley Area Plan Sites**



LANDWATCH
MONTEREY COUNTY

Oct. 23, 2024

Jaime S. Guthrie
Housing and Community Development
1441 Schilling Place, 2nd Floor
Salinas, CA 93901
Guthriejs@countyofmonterey.gov

RE: Notice of Preparation ("NOP") of a Draft Program Environmental Impact Report ("DPEIR") for the Draft Sixth Cycle (2023-2031) Housing Element Update ("HEU6")

Dear Ms. Guthrie,

The Draft Sixth Cycle (2023-2031) Housing Element Update ("HEU6") includes the following sites outside of urbanized areas in locations that would eliminate farmland, increase vehicle miles traveled (VMT) and associated greenhouse gas (GHG) and air pollutants, and, in some instances, cause biological resource and other impacts related to development in rural greenfield areas rather than urbanized infill areas. Monterey County should remove these sites from HEU6. At minimum, the DPEIR should include and evaluate an alternative that removes them.

Specifically, we urge removal of sites 1, 2, 24, 25, 26, 40, 47, 48, and 52:

- **Sites 1 and 2** involve extensive development on agricultural land. The sites are not within a highly developed area and have a correspondingly low TCAC score, rendering them unsuitable for affordable housing due to the failure to affirmatively further fair housing. They are outside of the community areas and rural centers designated under the 2010 General Plan Update.
- **Site 24** also involves extensive development on agricultural land and has a low TCAC score of 8.
- **Sites 25 and 26** consist of sprawl development in Chualar, also on agricultural land, and with a low TCAC score of 12.
- **Site 40** involves development of forested area and environmentally sensitive natural habitat.

- **Site 47** should be removed because it is environmentally sensitive natural lands on the former Fort Ord. The development consists primarily of market rate housing. SB 2295 doesn't apply because it's a private school. Therefore, the landowner, York, does not have the right to develop this parcel without rezoning, and rezoning is not appropriate in this location because it is on environmentally sensitive lands. Moreover, Marina Coast Water District cannot provide water to the site under the settlement agreement between Marina Coast Water District, LandWatch and Keep Fort Ord Wild.
- **Site 48**, on Sill Rd., would consist of development in an environmentally sensitive area that was previously the subject of litigation - litigation which ultimately halted the development. According to the County's site map, it has a TCAC score of 0. The County Housing Element should not facilitate more market rate housing on environmentally sensitive open space. Rather, it should encourage infill development near urban areas.
- **Site 52** involves development of farmland. There are plenty of other sites in Pajaro, for example, sites 49-51, so this one is not needed.

The 2010 General Plan EIR's impact analyses specifically relied on the County's plan to concentrate future development in infill areas and identified growth areas. It found that 80% of future residential development would be in urbanized infill like the Community Areas, Rural Centers, and Affordable Housing Overlays, and only 20% outside these areas. (2010 GP FEIR, pp. 2-118 et seq, Master Response 7, New Urban Development Outside Focused Growth Areas, available at https://www.countyofmonterey.gov/home/showpublisheddocument/45384/636389278167500000. The County found that a number of impacts from the 2010 General Plan would be less than significant based specifically on the assumption that at least 80% of future residential development would be in urbanized infill like the Community Areas, Rural Centers, and Affordable Housing Overlays.

The 2010 GP FEIR specifically found that the assumption of this 80/20 development pattern was justified by its assumptions about population distribution and trends, the 2010 GP policies themselves, and the need to accommodate affordable housing under RHNA through 2030.

> In summary, the assumption utilized in the DEIR impact analysis (80% of new growth would occur in focused growth areas; 20% outside of these areas) was derived from each of the factors described above, individually and collectively. Population distribution trends were the primary factor in deriving these assumptions. The remaining factors were applied to confirm whether the assumption was realistic. The combination of population distribution and composition trends, changes in community preferences over time, key principles and constraints in General Plan policies and State regulatory requirements for affordable

> housing suggest development between 2006 and 2030 will occur primarily in the Community Areas, Rural Centers and AHOs. These land use designations established in the General Plan are most able to provide affordable housing, employment, services and transportation options.

(Id. at 2-121.)

The 2010 GP FEIR cites a number of General Plan Policies that are intended to ensure that the County accommodates growth primarily in urbanized infill and designated growth areas. These include prioritization of Community Areas and Rural Centers under Policies LU-1.19), 2.21, and 2.30; the constraints of the Development Evaluation System under Policy LU-1.19; policies requiring Adequate Public Facilities and Services (Policies PS-1.1 through 1.6); and policies requiring proof of long-term sustainable water supplies and wastewater treatment (Policies PS-3.1 and PS-4.9). (Id. at 2-122.)

> These policies individually and collectively establish rigorous requirements for approval and a clear process for determining whether a proposal meets General Plan policy. By placing a priority on focused growth areas, by imposing an evaluation system for development outside these focused growth areas with minimum affordability requirements as well as other stringent criteria, and by requiring that new growth be adjacent to existing growth that has adequate services, growth outside focused growth areas would be extremely unlikely to exceed DEIR assumptions.

(Id. at 2-122 to 2-123.)

The 2010 GP FEIR cites its mitigation provisions that require preparation of a climate action plan as an additional assurance that the County will maintain compact growth to minimize impacts:

> The components of a "Greenhouse Gas Reduction Plan (Mitigation Measure CC-1a) and a "Climate Change Preparedness Plan" (Mitigation Measure CC-13) would by necessity rely on strategies that focus growth. The Climate Change Preparedness Plan would include provisions for limited growth in areas that could be more severely impacted by wildfire, sea level rise, and flooding. These requirements would further reduce the likelihood that new development, especially sprawl in the more remote areas of the County, would be supported.

(Id. at 2-123.)

The 2010 GP FEIR specifically provides that the County will reconsider the scope of the focused growth areas if changes to their boundaries are needed to ensure that at least 80% of future residential growth occurs in the focused growth areas and urban infill:

> Mitigation Measures BIO-1.4 and BIO 1.5 were revised to track actual growth against what was projected in the DEIR and make policy adjustments if current expectations are not met. These policies were revised to ensure that before growth in excess of the AMBAG 2004 growth projections for residential and commercial development occurs, the County will consider the expansion of focused growth areas or designation of new focused growth areas. These expanded or focused growth areas would be designed to keep the 80%/20% split between compact growth in cities and focused growth areas and growth outside focused areas.

(Id. at 2-123.) Accordingly, the County should designate the mouth of the Carmel Valley as a Community Area because it is clear that growth must be focused in this area to meet the RHNA obligations under HEU6.

The 2010 GP FEIR concludes that its policies will be effective in limiting growth to the focused growth areas.

> General Plan policies have been drafted specifically to limit growth outside focused growth areas. Commenters have not provided any evidence that the policies in the General Plan that restrict growth will not be followed other than conjecture about future policy decisions that could be made contrary to General Plan policies. By focusing growth through the development of community plans, infrastructure and finance plans, and imposing requirements for significant amounts of affordable housing as a prerequisite to approval of subdivisions outside of these areas, it is reasonable to expect that future growth will focus in compact development patterns near cities or in focused growth areas.

(Id. at 2-123 to 2-124.)

Because of this assumption, the 2010 GP FEIR does <u>not</u> assume the kind of sprawl development that would be permitted if Sites 1, 2, 24, 25, 26, 40, 47, 48, and 52 are designated for development. Development of these sites would be inconsistent with the General Plan policies intended to preclude just this kind of development and to avoid its environmental impacts.

Furthermore, if the County includes these sites, it could not tier from the 2010 GP EIR in preparing a programmatic EIR for the housing element because the 2010 GP EIR does not assume this kind of development. If these sites are included, the program EIR for the housing element would have to evaluate much more complex changes to the assumptions and impacts in the 2010 GP EIR. And the program EIR would likely cost more, take much longer to prepare, and be much more vulnerable to legal challenges.

For all of the foregoing reasons, LandWatch urges the County to omit these sprawl sites from the housing element's site inventory. The County should also adopt a policy designating the opportunity sites at the mouth of the Carmel Valley as a Community Area.

Thank you for your consideration.

Regards,



Michael DeLapa
Executive Director

Subject: County of Monterey Draft Housing Element Sixth Cycle Update, Response to Landwatch comments September 2024

Dear Mr. McDougall and Ms. Lee,

I am writing on behalf of York School in response to Landwatch's communication in September 2024, which opposed the inclusion of our Parcel—Site 47, APN 031-131-006-000—in the proposed Monterey County Housing Element for rezoning to high-density residential. We appreciate the opportunity to clarify some key points regarding this site.

1. **Current Use of the Land**: It is important to note, as outlined in the proposed Housing Element, this parcel is **not** considered vacant land. The site currently hosts a soccer field, football field, and track, all of which serve our students and hence the local community.
2. **Availability of Services**: The letter asserts that there are no services on the land which is a wholly inaccurate claim. We have a working potable well on-site and an agreement that allows us to utilize 32 acre-feet of groundwater. Additionally, we have commitments from Marina Coast Water (MCWD) to meet any incremental water and sewer needs should they arise. MCWD represented to us that they are contractually obligated to provide these services to our parcel and intend to fulfill this commitment. Contrary to Landwatch's claims, MCWD reviewed 3 different options with us for how they would bring additional water to the property as needed. Furthermore, the site is already equipped with electric service.
3. **Location and Surroundings**: Our site is strategically located, out of view from main roads and adjacent to the Ryan Ranch business complex on one side and residential housing on the other, and we stand ready to begin the development process once the housing element is approved and hence are confident that this land can be developed within the time period contemplated by the Housing Element.
4. **Community Needs**: We believe that many individuals who work in the Ryan Ranch area and throughout Monterey commute from Salinas and other surrounding regions due to the high cost of living in Monterey. By developing affordable and moderate-income housing on this site, we aim to provide local workers with better access to housing closer to their workplaces, ultimately benefiting the community and the environment by reducing commuting distances.

We urge you to rely on the leadership and expertise of the County in their recommendation to include our site in the housing element. York School has been a committed member of the community, and we are dedicated to continuing this legacy through our plans for developing this property.

Thank you for considering our position. We look forward to your support and are eager to contribute to the housing needs of our community.

Sincerely,

Doug Key
Head of School
York School, Monterey

Appendix B – Amendments to Monterey County Land Use Regulations and Code Amendments required to implement the County's Sixth Cycle (2023-2031) Housing Element ("HEU6").

The following list contains the anticipated amendments to the Monterey County Code, 2010 General Plan, and Local Coastal Program to implement the County's HEU6 (the "Project"). This list is may not be comprehensive and is intended to disclose the key topics that need to be addressed to implement the Project.

Adoption via Resolution

- Adoption of County of Monterey Objective Design Standards for multifamily development projects

Amendments to Monterey County Code

***Title 21 – Zoning (Inland)***

- Adoption of a By-Right Housing Ordinance for Opportunity Sites
- Amendments to HDR District Regulations to incorporate Objective Design Standards for qualifying developments
- Amendments to HDR District Regulations to allow for development of sites up to 25 or 30 dwelling units to the acre on Opportunity Sites
- Amend Zoning Sectional Maps

***Title 20 – Zoning (Coastal)***

- Adoption of a By-Right Housing Ordinance for Opportunity Sites
- Amend HDR Regulations to allow for development of sites up to 25 or 30 dwelling units to the acre on Opportunity Sites
- Amend Coastal Implementation Plans (CIPs) for North County and Carmel Area to allow for By-Right Development on select Opportunity Sites
- Amend Zoning Sectional Maps

Amendments to 2010 General Plan

***Land Use Maps***

Amend Land Use Designation Maps to reflect rezoning of sites to HDR/25 or HDR/30, and to reflect split land uses for safety or environmental reasons.

**Land Use Element** - The following policies in the Land Use Element will be amended to implement the Project: LU-1.19, LU-1.20, LU-2.3, LU-2.10, LU-2.11, LU-2.25, LU-2.28, LU-2.29, LU-2.30, and LU-2.33b.

**Circulation Element –** No anticipated amendments to implement the project.

**Public Services Element –** No anticipated amendments to implement the Project.

**Agriculture Element –** No anticipated amendments to implement the Project.

**Conservation and Open Space Element –** No anticipated amendments to implement the Project.

**Circulation –** No anticipated amendments to implement the project.

***Area Plan, Master Plan, and Community Plans***

**Carmel Valley Master Plan –** The following policies in the Carmel Valley Master Plan are anticipated be amended to implement the Project: CV-1.6, CV-1.10, CV-1.11, CV-1.13, CV-1.20, CV-1.24.

**North County Inland Area Plan –** The following policies in the North County Inland Area Plan are anticipated to be amended to implement the Project: NC-1.5.

**Greater Salinas Area Plan -** The following policies in the Greater Salinas Area Plan are anticipated to be amended to implement the Project: GS-1.13.

**Greater Monterey Peninsula Area Plan –** The following policies in the Greater Monterey Peninsula Area Plan are anticipated to be amended to implement the Project: GMP-1.1, and GMP-1.5.

**Toro Area Plan –** No anticipated amendments to implement the Project.

**Central Salinas Area Plan** - No anticipated amendments to implement the Project.

**Fort Ord Master Plan -** The following policies in the Fort Ord Master Plan are anticipated to be amended to implement the Project: Description of Base Land Use Designations – High Density Residential, Policy A-1.

**Castroville Community Plan -** The following policies and sections in the Castroville Community Plan are anticipated to be amended to implement the Project: Land Use Designation for Opportunity Sites, HDR Land Use Designation, and incorporate of By-Right Ordinance and County Design Standards by reference.

<u>Amendments to Local Coastal Program</u>

***Land Use Designation Maps***

Amend Land Use Designation Maps to reflect rezoning of sites to HDR/25 or HDR/30, and to reflect split land uses for safety or environmental reasons (as needed).

***Land Use Plans***

**North County Land Use Plan –** The following policies and sections of the North County Land Use Plan are anticipated to be amended to implement the Project: Various sections and policies that need to be modified to allow for the Project (rezoning of one Opportunity Site 48), and amendments to buildout numbers (as needed) to allow for the development called for in the Project.

**Carmel Area Land Use Plan -** The following policies and sections for the Carmel Area Land Use Plan anticipated to be amended to implement the project: Creation of an HDR land use designation, amendments to build out numbers (as needed) to allow for the development called for in the Project (rezoning of Opportunity Sites 16 and 43).

AN ORDINANCE OF THE COUNTY OF MONTEREY, STATE OF CALIFORNIA, ADDING ____ TO THE MONTEREY COUNTY CODE RELATING TO APPROVAL PROCESS FOR BY-RIGHT AFFORDABLE HOUSING DEVELOPMENT

ORDINANCE NO. ___

County Counsel Summary

The Board of Supervisors of the County of Monterey ordains as follows:

**SECTION 1:** Findings [to come: refer to implementation of Housing Element, goal of streamlining and expediting the approval process for affordable housing]

**SECTION 2:** Chapter 21.55 is added to the Monterey County Code to read as follows:

**CHAPTER 21.55**

**BY-RIGHT APPROVAL**

**21.55.010 Purpose.**

**21.55.020 Applicability.**

**21.55.030 Definitions.**

**21.55.040 Permit requirements.**

**21.55.050 Development standards.**

**21.55.070 Adoption of development standards.**

**Section 21.55.010 – Purpose.**

The purpose of this chapter is to establish procedures for approval of affordable housing developments that meet certain criteria and that are located on certain sites identified in the 2023-2031 Sixth Cycle Housing Element, in accordance with California Government Code sections 65583.2(i), 65913.4, and 65913.6, to be treated as "uses by right". The procedures herein are intended to implement Programs H-2.D, H-2.H, and H-3.A of said Housing Element to streamline and expedite the approval process for housing affordable to lower income households.

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**Section 21.55.020 – Applicability.**

This chapter applies to "use by right" as defined in Government Code Section65583.2(i), which includes, but is not limited to, the following:

A. Opportunity Sites identified in the 2023-2031 Sixth Cycle Housing Element that meet an affordability requirement of 20% lower-income household and meets a project density of 20 dwelling units to the acre;
B. Opportunity Sites identified in the 2023-2031 Sixth Cycle Housing Element that are located in a Community Plan area, Rural Center, or Affordable Housing Overlay as identified by the 2010 General Plan with a housing development project that is designated 100% affordable;
C. Housing development projects that are 100% affordable on properties within a Community Plan area, Rural Center, or Affordable Housing Overlay as identified by the 2010 General Plan;
D. Housing development projects on land owned by a religious institution or a non-profit independent institution of higher education where the project meets the affordability requirements and other requirements of Government Code section 65913.6; and
E. Other "use by right" housing development that may be required by the Legislature, as that term is defined in Government Code Section 65583.2(i), as periodically amended .

**Section 21.55.030 – Definitions.**

For purposes of this chapter, these definitions shall apply:

A. "Lower income household" means persons and families meeting the definition of "lower income household" set forth in California Health and Safety Code section 50079.5.
B. "Moderate income household" means persons and families meeting the definition of "moderate income household" set forth in California Health and Safety Code section 50079.5.
C. "Opportunity Site" means the opportunity sites identified in the 2023-2031 Sixth Housing Element to meet the County's regional housing need allocation (RHNA).
D. "Use by Right". For purposes of this section, "use by right" means the County's review shall not require a Conditional Use Permit, General Development Plan, environmental review under the California Environmental Quality Act, or other discretionary review or approval pursuant to Government Code Section 65583.2(i) and Government Code Section 65589.5 for owner-occupied or multifamily

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residential housing. Housing developments shall be subject to all objective standards in Monterey County Code, including the County of Monterey's Model Objective Design Standards as adopted by the Board of Supervisor's resolution and amended from time to time. Any subdivision of a site shall continue to be subject to all laws, including, but not limited to, discretionary review and approval in compliance with County Code Chapter 19 (Subdivisions) and the Subdivision Map Act.

**Section 21.55.040 - Permit Requirements.**

Housing developments that comply with all of the development standards in Section 21.55.050 (Development standards), below, shall be allowed as a use by right subject to the issuance of a Zoning Clearance in compliance with Chapter 21.70 (Zoning Clearances).

**Section 21.55.050 - Development standards.**

Qualifying housing developments listed in Section 21.55.020 above shall comply with the following development standards:

A. Housing Type. The housing development shall consist of owner-occupied and/or rental multifamily residential uses.
B. Affordability. The applicant shall record a restrictive covenant that ensures the continued affordability of all very low, low, and moderate income rental units for 55 years and all very low, low and moderate income for-sale units for 45 years, unless a different affordability term is required by low-income tax credit regulations or other applicable law.
C. Objective standards. The housing development shall comply with all objective land use policies, regulations, development standards, and design review standards in effect at the time a complete application is submitted, including but not limited to objective design standards provided in the County's Objective Design Standards, adopted by the Board of Supervisors by Resolution and amended from time to time, and other applicable sections of the Monterey County Code.
D. Program Environmental Impact Report mitigation measures. The housing development shall comply with all applicable mitigation measures identified as objective ("OBJ") of the Mitigation Monitoring and Reporting Program of the 2023-2031 Housing Element Update Program Environmental Impact Report (State Clearinghouse Number: 2024100963)

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E. Replacement Units. Existing or previously existing dwelling units on housing development sites shall be replaced in the manner provided in Government Code Section 65583.2(g)(3), as periodically amended, or successor statute.

**Section 21.55.070 – Adoption of development standards.**

The Board of Supervisors may, by separate resolution, adopt objective, quantifiable, written development standards. Other relevant policies, including standard conditions of approval, that would be applicable to affordable housing development projects, shall be ministerially reviewed and approved under this Chapter.

SECTION 3. E**FFECTIVE DATE.** This ordinance shall become effective on thirty-first day following its adoption.

PASSED AND ADOPTED on this ___ day of _____, 2026, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Chair,

Monterey County Board of Supervisors

ATTEST:

Valerie Ralph

Clerk of the Board of Supervisors

By: _____

Deputy

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**AN ORDINANCE OF THE COUNTY OF MONTEREY, STATE OF CALIFORNIA, ADDING ____ TO THE MONTEREY COUNTY CODE RELATING TO APPROVAL PROCESS FOR ZONING CLEARANCES**
**ORDINANCE NO. ___**

**County Counsel Summary**

**The Board of Supervisors of the County of Monterey ordains as follows:**

**SECTION 1:** Findings [to come: refer to processing of ministerial permits including "use by right", goal of streamlining and expediting the approval process for affordable housing]

**SECTION 2:** Chapter 21.71 is added to the Monterey County Code to read as follows:

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## CHAPTER 21.71
## REGULATIONS FOR ZONING CLEARANCES

**21.71.010 Purpose.**
**21.71.020 Applicability.**
**21.71.030 Appropriate authority.**
**21.71.050 Application.**
**21.71.070 Action by appropriate authority.**
**21.71.080 Revocation.**
**21.71.100 Expiration.**
**21.71.110 Effect.**
**21.71.130 Filing fee.**
**21.71.140 Extension to zoning clearances.**
**21.71.150 Amendments to zoning clearances.**

### 21.71.010 Purpose.

The purpose of this Chapter is to provide a ministerial process for projects identified as needing approval of a "Zoning Clearance" in the Monterey County Code. The ministerial process will verify that the proposed land use or structure complies with the list of uses allowed in the applicable zoning district, the development standards within Monterey County Code, and is consistent with the County of Monterey regulations.

### 21.71.020 Applicability.

Any development identified within the zoning district regulations as being a permitted use requiring a zoning clearance is subject to the provisions of this Chapter.

**21.71.030 Appropriate authority.**

The Chief of Planning or designee is the Appropriate Authority to consider zoning clearances.

**21.71.050 Application.**

Application for a zoning clearance shall be made to the Appropriate Authority in writing on a form prescribed by the Chief of Planning and shall be accompanied by statements, plans, and elevations necessary to show the detail of the proposed use or structure.

**21.71.070 Action by appropriate authority.**

A. The Appropriate Authority shall deem the permit application complete if it contains all required information, documents, and all required application fees have been paid.

B. In acting on zoning clearance, the Appropriate Authority shall find that the proposed use or development is in conformance with all applicable provisions of this Title or other adopted policies of the County.

**21.71.080 Grounds for revocation.**

A. Any of the following shall be grounds for revocation of a zoning clearance:

1. Any act or omission by an operator in contravention of federal law, state law, or the Monterey County Code;

2. If such clearance was granted on the basis of false material information, written or oral, given willfully or negligently by the operator;

3. If the use or structure is operated or maintained in an unlawful manner or in such a manner as to be a nuisance to the health, safety, or welfare of the public; and

4. Failure to pay all applicable taxes, fees, and penalties required by the County.

B. If the Appropriate Authority determines that grounds for revocation of the zoning clearance exist pursuant to this Section, the Appropriate Authority shall issue a

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written notice of intention to revoke the zoning clearance. The notice of intention shall describe the property, the intention to revoke the zoning clearance, the grounds for revocation, the action necessary to abate the violation, and the time limit for compliance.

**21.71.100 Expiration.**

A. Any zoning clearance issued under the terms of this Chapter shall be valid until the date of expiration stated on the zoning clearance. If no date of expiration is stated or any zoning clearance which allows a use without the construction of buildings or other structures, shall expire 180 days from the date of granting the zoning clearance unless use of the property has begun within this period.

B. If no date of expiration is stated, or any zoning clearance granted under this Chapter which allows for the construction of buildings or other structures shall remain valid as long as actual construction has begun within 180 days from the date of the granting of the zoning clearance.

**21.71.110 Effect.**

A zoning clearance shall be obtained before the County issues new or modified Building Permits, Grading Permits, and any other Permits that may be required for operation of the use. Permits shall not be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the zoning clearance granted by the Appropriate Authority.

**21.71.130 Filing fee.**

The application fee for zoning clearance shall be established from time to time by the Board of Supervisors, a part of such fee shall be refundable, unless said refund is requested in writing concurrent with the withdrawal of zoning clearance and provided that the applicant has not yet been sent written notice of the applications completeness or incompleteness. In such cases, fifty (50) percent of the filing fee shall be refunded.

**21.71.140 Extension to zoning clearances.**

A. The Appropriate Authority may extend a zoning clearance upon receipt of a written request from the applicant, provided such request is made at least 30 days prior to the expiration of the zoning clearance. The written request shall be filed with the Appropriate Authority and set forth reasons supporting the request.

B. The extension request shall be subject to the provisions of Chapter 21.71.040 of this Title.

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**21.71.150 Amendments to zoning clearances.**

Proposed amendments to any zoning clearance issued under the provisions of this Chapter shall be submitted to the Appropriate Authority in writing and in sufficient detail to adequately assess the nature of the amendment and any potential impacts of the amendment. Proposed amendments shall be handled in the following manner:

The Appropriate Authority shall determine if the amendment is of a minor nature by reviewing the following standards: 1) the amendment would not result in any environmental impacts, 2) the amendment is consistent with the prior action of the Appropriate Authority, 3) the amendment would result in minimal impacts to the land in relation to the approved zoning clearance, and 4) the amendment would meet all relevant site development standards. If these standards are met, then the amendment shall be approved by the Appropriate Authority. All other amendments are considered major in nature and would require a discretionary permit.

**SECTION 4. SEVERABILITY.** If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

**SECTION 5. EFFECTIVE DATE.** This ordinance shall become effective on the thirty-first day following its adoption.

PASSED AND ADOPTED on this_____ day of _____, 2026, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:_____

Chair,
Monterey County Board of Supervisors

ATTEST

VALERIE RALPH
Clerk of the Board of Supervisors

By: _____

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Deputy

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# *County of Monterey Model Objective Design Standards*

## Purpose and Intent

A. **Purpose and Intent.** The purpose of this Chapter is to provide the public, building and design professionals, and decision-makers with objective criteria for multiple-unit and mixed-use housing development projects in the county. The intent is to provide clear design direction that enhances an area's unique character and sense of place, respects existing neighborhood compatibility and privacy, and ensures a high-quality living environment. It is also intended that this Chapter establish "objective" design standards, as that term is defined under state housing law, that apply to multiple-unit residential and mixed-use development projects where state housing law restricts County review of such projects to objective standards, to the fullest extent permitted under state housing law.

B. **Applicability.** The provisions of this Chapter apply to multiple-unit residential and mixed-use development in all Zone Districts, including such development that constitutes a "housing development project" under Government Code Section 65589.5 (Housing Accountability Act), qualifying "multifamily housing development" under Government Code Section 65913.4 (SB 35), and "supportive housing" under Government Code Section 65651 (AB 2162), as well as any other multiple-unit residential or mixed-use development project for which the Department may require compliance with "objective" standards under applicable state housing law.

C. **Consistency with All Objective Standards.** In addition to the objective design standards established in this Chapter, multiple-unit residential and mixed-use development projects shall also comply with all other applicable objective standards and policies, including, but not limited to: development standards as listed in the base zoning district (Title 21 (inland) or Title 20 (coastal), requirements from other departments and outside agencies as outlined in the Monterey County Code, and all adopted design guidelines per the 2010 General Plan, Local Coastal Program, applicable area plans, community plans, and master plans.

   1. **Exception.** Applicants may request concessions, incentives, or waivers of development standards pursuant to Chapter 21.65 (Density Bonus Program).
   2. **Conflicting Standards.** If there is any conflict between the objective standards set forth in this Chapter and any existing County or State objective standards, the objective standard that would permit the allowable maximum density as noted on the sectional district map (i.e. HDR/25 or HDR/30) shall apply.
   3. **Consistency with Design Guidelines.** In addition to compliance with the County's Objective Design Standards, projects shall also be consistent with Design Guidelines outlined in the Castroville Community Plan, Carmel Valley Master Plan, and Carmel Valley Village Development Criteria.
   4. **By-Right Approval and By-Right Uses.** Projects that qualify for processing under Chapter 21.55 (By-Right Approval) shall comply with additional standards identified in that Chapter.

   Nothing in this Chapter is intended to limit the County's discretion, to the fullest extent permitted under law, to condition the approval of multi-unit residential and mixed use development projects, as authorized under state housing law and this code.

D. **Design Review Exemption.** Multi-unit and mixed-use projects that are subject to these Standards, which comply with all applicable objective design review standards, shall not be subject to separate Design Approval under Monterey County Code Title 21. In the event that any other provision of Monterey County Code Title 21, in conflict with this provision, requires Design Approval for a project subject to these Standards, these Standards shall apply. However, a maximum of one non-binding conceptual review by the appropriate appointed authority may occur to improve project design.

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E. **Design Standards Compliance.** Department staff may consult with the appropriate department appointed representative, designee, or other design professional to assist in determining a project's compliance with the objective design standards contained in this Chapter.

## Building Design

A. **Building Form, Massing, and Articulation.**

1. **Building Form and Vertical Hierarchy.** Buildings that are three stories or more in height shall be designed to differentiate between a defined base; a middle or body; and a top, cornice, or parapet cap. Buildings two stories or less shall include a defined base and a top, cornice, or parapet cap. All buildings shall achieve this effect through at least two of the following:
    a. Color, texture, or material changes.
    b. Variations, projections, or reveals in the wall plane.
    c. Variations in fenestration size or pattern.
    d. Decorative architectural details, such as cornices and columns.
    e. Landscaping screening
2. **Wall Plane Variation.** Building façades visible from the primary street shall not extend more than 50 feet in length without either an architectural element or a two-foot variation in depth in the wall plane. Architectural elements include: building entrances, front porches, balconies, upper-story setbacks, projections, and recessions, such as stoops, bay windows, overhangs, and trellises.
3. **All-Sided Architecture.** Buildings shall be designed and articulated with common details, articulation, materials, and elements on all sides.
4. **Roof Line Variation.** Roof lines shall not extend more than a length of 50 feet without at least one prominent change as described below:
    a. Variation in roof form, such as hip, mansard, gable, shed, and flat with parapet.
    b. Variation in architectural elements, such as parapets or varying cornices.
    c. Variation of roof height of at least 24 inches for buildings of two stories or less and 30 inches for buildings of three stories or more (as measured from the highest point of each roof line).
5. **Roof Slopes.**
    a. For buildings of three or more stories or roof spans of 30 feet or greater, sloped roofs shall have a minimum pitch of 4:12.
6. **Parapets.**
    a. Where rooftop equipment is located within 10 feet of a roof edge, a parapet shall be provided that is a minimum of six inches taller than all roof-top equipment.
    b. Interior side of parapet walls shall not be visible from a common open space or public right-of-way.
    c. Parapets shall be capped with precast treatment, continuous banding, projecting cornices, dentils, or similar edge treatment.

B. **Building and Dwelling Unit Entrances.**

1. **Primary Building Entrance.**
    a. **Street-Facing Entrance.** Buildings located within 20 feet of the primary street right-of-way shall have a ground-level primary building entrance facing the primary street.

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2. **Exterior Individual Dwelling Unit Entrance.**

    a. **General Requirement.** All individual unit entrances shall have either a projected sheltering element or be recessed from the main facade; the projection or recess shall have a minimum depth of 24 inches.

    b. **Visibility.** All individual unit entrances shall be illuminated or shall face towards a common area or public street.

    c. **Street-Facing Unit Entrance.** Each dwelling unit located within 20 feet of a primary street right-of-way shall include at least one street-facing porch, balcony, or patio unless a setback of five feet or less is provided.

    d. **Upper-Floor Unit Entrance.** Exterior entrances to individual dwelling units on upper floors are permitted.

3. **Architectural Treatments.** Entrances for buildings and individual dwelling units shall incorporate at least two of the following architectural treatments:

    a. Feature window details;

    b. Towers;

    c. Decorative veneer or siding;

    d. Porches or stoops; or

    e. Changes in roof line or wall plane.

C. **Windows.**

1. **Privacy.** Where windows are proposed within 10 feet of a window on another building, the design and placement shall avoid unfiltered/direct views into the adjacent site and shall be designed with one or more of the following:

    a. Use non-transparent or obscured glazing, such as frosted/patterned glass. Reflective glazing is not permitted.

    b. Provide permanent architectural screens or affixed louvers at windows.

    c. Offset windows horizontally at least 12 inches from any windows in adjacent buildings (edge to edge), so as not to have a direct line-of-sight into adjacent units.

    d. Permanent landscaping screening.

2. **Window Treatment.**

    a. **Design Treatment.** Windows shall either be recessed at least three inches from the plane of the surrounding exterior wall or shall have a trim or windowsill at least one-half inch in depth.

    b. **Windows Facing a Public Street.** Windows facing a public street shall feature enhanced window treatments, such as decorative architectural brackets, trim, shutters, awnings, and/or trellises.

D. **Materials and Colors.**

1. **Wall Material.** The primary exterior siding material for buildings shall be wood, composite wood, stone, stone veneer, granite, slate, brick, brick veneer, stucco, plaster, fiber cement, vinyl, or metal including aluminum or steel. The use of exposed plywood and reflective materials is prohibited.

2. **Window Consistency.** Window frame materials and color shall be used on all elevations.

3. **Accent Material.** Use of two or more accent materials, such as glass, tile, brick, stone, concrete, wood, metal, or plaster, shall be incorporated to highlight building features.

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4. **Colors.** Material colors shall consist of materials and paint shall be consistent with the County's adopted area Design Guidelines and rural character. Paints shall be non-reflective.

5. **Architectural Consistency.** Affordable units and market rate units in the same development shall be constructed of the same exterior materials and details such that the units are not distinguishable from one another in quality and detail.

E. **Parking Structures.**

1. **Wall Plane Variation.** Building façades visible from the primary street shall not extend more than 50 feet in length without at least one of the following: a two-foot variation in depth in the wall plane, architectural element, or other prominent feature that provides visual interest.

2. **Materials and Colors.** The parking structure shall utilize the same colors and materials as the primary buildings.

3. **Articulation.** The exterior of the parking structure shall apply at least one of the following as articulation:

    a. Applied materials, such as brick, stone, and/or siding, which extend at least two inches from the face of the structure to the face of the applied materials. Painted concrete, smooth concrete, or stucco walls shall not be considered sufficient articulation.

    b. Decorative architectural features, such as cut metal screens, awnings, trellises, louvers, and/or decorative security grills.

4. **Vertical Plantings.** Vertical plantings shall be located between openings, entrances, and architectural accent features. Plantings shall be evergreen vegetation that will grow to a minimum height equivalent to 75 percent of the height of the parking structure; container size shall be selected to achieve a height of at least 50 percent of the height of the parking structure within at least two years from the time of installation.

F. **Garages and Carports.**

1. **Garages.**

    a. Garage doors shall be recessed a minimum of six inches from the surrounding wall plane.

    b. Garages shall feature at least one of the following treatments:

        i. Garage door windows.

        ii. Paneled garage door surface.

        iii. Two different colors.

        iv. Alternative architectural materials, finishes, or treatments.

2. **Carports.** Carports shall incorporate the same colors and materials as the primary residential or mixed-use building design.

## Site Design

A. **Building Placement and Orientation.**

1. **Street Facade.** If buildings on adjacent properties establish a contiguous street facades along the primary street frontage, new buildings shall be located to maintain the contiguous street wall, with allowances for variation in facade and entrances which are projected or recessed.

2. **Visibility of Entrances.** On all lots 60 feet or less in width, at least one primary building entrance or individual unit entrance shall be visible from the front or street side lot line.

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3. **Buffer for Adjacent Single Family Homes.** When developing multi-family buildings of three or more stories adjacent to single-family residential zones, site design shall utilize parking areas, common open space, landscaping, and/or other site features to provide a buffer for adjacent development.

B. **Vehicular Parking and Access.** Vehicular parking and access shall comply with the provisions of Chapter 21.58 Regulations for Parking of the Monterey County Code. Specific design criteria listed here shall be provided and supersede any conflict requirements in Chapter 21.58:

1. **Primary Access.** Side street or alley access shall serve as the primary vehicular access to parking areas, if available. If not available, the primary street shall serve vehicular access.

2. **Number of Access Points.**

    a. **Normal Lots.** A maximum of one vehicle access point from the street is permitted per 100 feet of street frontage.

    b. **Corner Lots.**

        i. One vehicular access point is permitted per lot where all street frontages are less than 100 linear feet.

        ii. Two vehicular access points are permitted on lots where at least one street has a frontage of 100 linear feet or more.

3. **Parking Location.** Parking areas shall not be located within any front or street side setback.

4. **Mixed-Use Loading and Service Areas.** In addition to the provisions below, loading and service areas shall comply with the standards of Chapter 21.58 Regulations for Parking of the Monterey County Code, as applicable.

    a. All required loading and service areas shall be located adjacent to a façade other than the primary street frontage.

    b. Loading and service areas shall be located so as to not disrupt or block the flow of on-site and off-site vehicular traffic.

    c. Loading and service areas shall not be located adjacent to residential dwelling units or common open space areas.

    d. Loading and service areas shall be screened from view with walls, solid fencing, and/or landscape privacy screening as described in Section E: Landscaping.

    e. On-Site Loading Spaces. Every nonresidential use shall provide and maintain on-site loading and unloading spaces for vehicles as required by Chapter 212.58 Regulations for Parking and Loading.

5. **Enhanced Paving for Entrance Driveways.** Paving treatment using patterned and/or colored pavers, brick, or decorative colored and/or scored concrete shall be used for entrance driveways, a minimum of 14 feet in length, and spanning the width of the entrance driveway.

6. **Vehicle Light Intrusion.** Vehicle headlights shall be obstructed from direct alignment with habitable interior spaces with a minimum 3-foot high evergreen shrub or vine and/or features such as fencing or walls.

C. **Pedestrian Circulation and Access.**

D. **General.** The following pedestrian walkways shall be provided and interconnected within the site:

    a. Pedestrian walkways shall connect residential dwelling units to areas throughout the site, such as vehicle parking areas, bicycle parking areas, common open space, waste and recycling enclosures, and other amenities.

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b. Pedestrian walkways shall connect public sidewalks, building entrances, and vehicle parking areas.

c. Pedestrian walkways shall connect building entrances and vehicle parking areas through the site interior to all transit stops directly adjacent to the site.

E. **Pedestrian Walkways.** Pedestrian walkways shall be provided with a minimum width of four feet along their entire length and shall be designed as follows:

a. **Through Lot Connection.** Through lots located more than 300 feet from a street intersection, measured from the closest point of the lot, shall provide a publicly accessible sidewalk or walkway connecting the two streets.

b. **Materials.** Walkways shall be constructed of firm, stable, and slip-resistant materials, such as poured-in-place concrete (including stamped concrete), permeable paving, decomposed granite, or concrete pavers.

c. **Paving for Pedestrian Crossings.** Where an intersection of pedestrian and vehicle access exists, the pedestrian walkway shall be clearly identifiable with a raised crosswalk, a contrasting paving material, striping or similar method.

d. **Maintenance.** Pedestrian walkways shall be maintained in good condition for the life of the project and shall not be allowed to fall into disrepair so as to constitute a nuisance or hazard to the public.

F. **Common Open Space.** Common open spaces for multiple-unit developments shall comply with the minimums required by the base Zone District in which they are located in accordance with Chapter 21. Rooftops may be used to satisfy up to 75% of the common open space requirements.

G. **Landscaping.** Landscaping shall be used for all outdoor areas that are not specifically used for parking, driveways, walkways, or open space.

1. **Additional Landscaping Requirements.** Landscaping must comply with Chapter 16.63 (Landscaping), including all requirements of the State and County's Water Efficient Landscaping Ordinance (WELO) including the submittal of irrigation plans.

2. **Plant Materials.** Plant materials are limited to California native, non-invasive Mediterranean, and other drought-tolerant species.

3. **Parking and Loading Area Landscaping.** Parking and loading area landscaping must comply with the following standards:

a. **Screening between residential and nonresidential uses.** Where nonresidential parking areas abut residentially zoned or developed property, a wall or solid fence not less than five feet in height shall be constructed and maintained between the parking area and the adjoining residentially zoned or developed property.

b. **Existing trees.** The design of the parking area should make the best use of the growth and shade provided by existing trees on the project site.

c. **Screening requirements and authority.** Screening shall be provided adjacent to all lot lines consisting of a five-foot wide strip, planted with sufficient shrubbery to effectively screen the parking area, or a solid fence or wall not less than four feet in height. Fences or walls abutting streets shall be ornamental in texture, pattern, or shadow relief. Planting, fences, or walls abutting streets shall not exceed 30 inches in height for a distance of 25 feet on either side of entrances or exits to the property. This requirement for screening may be waived or modified by the review authority if the adjacent property already has provided a solid wall not less than four feet in height.

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d. **Additional requirements for uncovered parking areas exceeding 3,600 square feet.** When the total uncovered parking area on the project site (including adjoining lots over which the project has parking privileges) exceeds 3,600 square feet, the following shall be required, in addition to other provisions of this Section, as part of a landscape plan:1.Trees, shrubbery, and ground cover shall be provided at suitable intervals in order to break up the continuity of the parking area. Planting islands for these trees and shrubs shall be protected from automobile traffic by either asphalt or concrete curbs.2.Landscape islands shall be provided at the ends of all parking lanes.

4. **Landscape Buffer.** A landscape buffer of a minimum width of five feet shall be located between all ground-level restricted open spaces and pedestrian walkways. The buffer shall be planted to create a barrier while ensuring visibility. Plants shall be selected to enhance security (e.g. spines or thorny plants) and shall be demonstrated to grow to a minimum height of four feet.
5. **Pedestrian Walkways.** Pedestrian walkways shall be flanked on at least one side with landscaping, and may include a mix of turf, groundcover, and shrubs. Trees shall be provided along walkways in order to shade at least 50 percent of the overall walkway length at maturity.
6. **Number of Plants.** A minimum of one 15-gallon tree or equivalent box size and 10 five-gallon shrubs shall be planted for every 1,000 square feet of required landscape area.
7. **Groundcover.** Groundcover shall be sized and located to cover at least 75 percent of all landscape areas that are not planted with shrubs or trees within 5 years of installation.
    a. While groundcovers and shrubs are establishing, a minimum layer of 3-inch bark mulch or decorative gravel shall be placed within all landscape areas to provide 100 percent coverage of such landscape areas.
8. **Plant Selection.** Artificial or synthetic plants, except for turf, are prohibited. Artificial turf is not permitted in front or street side setbacks.
9. **Solar Access.** Landscaping shall not obstruct solar access to adjacent solar collectors for water heating, space heating or cooling, or electricity generation.
10. **Privacy.** Landscape screening shall obscure direct sight lines into dwelling units and open space areas from communal areas such as parking areas, common mailboxes, and pedestrian walkways. Landscape screening may be used in combination with walls, fencing, and/or trellises to screen views.
    a. **Location.** Landscape screening shall fit within associated planting areas and canopy sizes must not overlap with building foundations or eaves.
    b. **Plant Selection.** Landscape screening shall use evergreen trees, shrubs, and/or vines located and sized to buffer views. Deciduous species, perennials, and grasses or grass-like plants are not permitted for privacy screening.
    c. **Minimum Sizes.** Landscape screening and vegetation shall use the following minimum container sizes at the time of planting:
        i. Trees 15-gallon size.
        ii. Shrubs 5-gallon size.
        iii. Vines 5-gallon size.

## Mixed Use Standards

A. **Ground Floor Height.** The ground floor of a mixed-use building shall have a minimum floor height of 12 feet, measured from the finished ground floor to the bottom of the finished second floor.

B. **Ground Floor Transparency.** Exterior walls facing a public street shall include transparent windows and doors for at least 50 percent of the building wall area located between three and seven feet above the

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elevation of the sidewalk. Parking garages are not required to meet the ground floor transparency requirement.

C. **Street-Facing Setbacks.** Street-facing setbacks shall be landscaped and/or prepared for use by pedestrians. The setback area on each lot shall contain at least two amenities per 50 linear feet, such as benches, drinking fountains, shade structures, or other design element (e.g., public art, planters, kiosks, etc.).

D. **Street-Facing Entrance.** Mixed-use buildings located within 20 feet of a primary street right-of-way shall incorporate at least one primary building entrance directly from the public sidewalk or right-of-way. The primary building entrance shall include weather protection that is a minimum of six feet wide and four feet deep by recessing the entrance or providing an awning or similar weather protection element.

## Utilitarian Elements

A. **Bicycle Parking.** Bicycle parking shall be provided as follows:

1. **Parking Spaces Required.** One (1) space for every two (2) dwelling units. A minimum of two (2) spaces shall be provided.

2. **Parking Location.** Bicycle parking must be located on the same lot as the use it serves.

    a. Located at surface levels near main pedestrian entrances to nearby facilities or structures, or in the parking garages of such facilities or structures;

    b. Located so as not to block pedestrian entrances, walkways, or circulation patterns in or around nearby facilities or structures;

    c. Accessible to and from nearby public streets and sidewalks for the target users of the bicycle parking;

    d. Accessible only to residents and owners, operators, and managers of a residential facility when the involved use is residential.

3. **Size and Accessibility.** Each bicycle parking space must be a minimum of two feet in width and six feet in length and must be accessible without moving another bicycle. Two feet of clearance must be provided between bicycle parking and adjacent walls, poles, landscaping, street furniture, drive aisles, and pedestrian ways, and at least five feet from vehicle parking spaces.

4. **Anchoring and Security.**

    a. Bicycle parking must be located in one or more of the following:

        i. An enclosed bicycle locker;

        ii. An illuminated, fenced, covered, and locked or guarded bicycle storage area;

        iii. A secure area within a building or structure.

    b. Bicycle Locker. When using bicycle lockers, they shall be:

        i. Of sufficient size to hold an entire bicycle; and

        ii. Securely anchored to a permanent surface.

    c. Bicycle Rack. When using bicycle racks, they shall be:

        i. Located and installed to support an entire bicycle, including the frame and wheels, so that the frame and wheels can be locked without damage when using a customary, heavy-duty cable, or U-shaped bicycle lock, or any other security device.

B. **Trash, Recycling, and Green Waste Container Enclosures.** Enclosures for recycling, green waste, and any other waste containers required by law are required for multiple-unit and mixed-use developments, and shall comply with the provisions of Chapter 10.41 (Solid Waste Collection and Disposal) and the applicable zoning district regulations in Section 21.10.070 (HDR Special Regulations) or Section 21.12.070 (MDR Special Regulations). Enclosures shall be located within a building, incorporated into the exterior building design, or located within a detached enclosure designed and placed as follows:

1. **Location.** The enclosure shall be located to the rear or side of the building(s) and located outside of view from a public right-of-way.
2. **Materials.** The enclosure shall incorporate the materials and colors of the primary residential or mixed-use building design.

C. **Fences and Walls.** Fences and walls shall comply with the provisions of Title 21 applicable to Fences and Walls and the following standards:

1. Fences can be a maximum of 6 feet in height and shall comply wit the setbacks for accessory structures as defined in the HDR and MDR regulations.

D. **Lighting.** Lighting shall comply with the provisions of Section 21.63.020 (Design Guidelines for Exterior Lighting).

E. **Screening of Mechanical Equipment.** The following development standards shall apply to new development projects subject to this Chapter, as well as to the replacement or provision of new equipment that is added to serve existing building(s) that are subject to this Chapter.

1. **General Requirements.** All exterior mechanical equipment, whether on a roof, on the side of a structure, or located on the ground, must be screened from public view. Exterior mechanical equipment to be screened includes, without limitation, heating, ventilation, air conditioning, refrigeration equipment, plumbing lines, ductwork, transformers, smoke exhaust fans, water meters, backflow preventers, service entry sections, and similar utility devices.
    a. Screening must be architecturally integrated into the main structure with regard to materials, color, shape, and size to appear as an integral part of the building or structure.
    b. Equipment must be screened on all sides.
    c. The use of expanded metal lath or chain link for the purpose of screening is prohibited.
2. **Requirements for Specific Types of Mechanical Equipment.** The following additional screening standards apply to the specified types of mechanical equipment.
    a. **Ground-Mounted Equipment.** Ground-mounted equipment that faces a public viewing area must be screened to a height of 12 inches above the equipment and designed and painted to blend in with the surrounding area, unless such screening conflicts with utility access, in which case screening shall comply to the greatest extent that is technically feasible. Acceptable screening devices consist of decorative walls, berms, and/or plant materials.
    b. **Exterior Wall Equipment.** Screening for wall-mounted equipment, (e.g., electrical meters, cable-connection boxes, electrical distribution cabinets, etc.) must incorporate elements of the building design (e.g., shape, color, texture, material, etc.). For screen walls that are three feet in height or lower, vegetative materials may be substituted for the screening device. This requirement does not apply to equipment that has accessibility and visibility requirements for health and safety.

F. **Vents and Exhaust.** All wall-mounted vent and exhaust elements shall be located at interior corners of building walls or behind building elements that conceal them from public view. All flashing, sheet metal vents, exhaust fans or ventilators, and pipe stacks shall be painted a color to match the adjacent roof or wall material.

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## Definitions.

For the purpose of the County of Monterey Design Standards, the following definitions apply. Any terms used in the Design Standards that are undefined below, but that are defined in Chapter 21.06 (Definitions), shall have the meaning ascribed to them in Chapter 21.06.

**Bracket.** A projection from a vertical surface providing structural or visual support, typically found under cornices, balconies, windows, or any other overhanging element.

**Cornice.** A projecting shelf along the top of a wall supported by a series of brackets; the exterior trim where a roof and wall meet, consisting of soffit, fascia, and crown molding.

**Fenestration.** The arrangement, proportioning, and design of windows, doors, and other exterior openings in a building.

**Groundcover.** Low-growing herbaceous or woody vegetation, other than turf, which typically grows less than two feet high and is used for understory planting under shrubs and trees. Generally grows with a creeping or spreading habit and is used to cover bare soil areas within landscape planter areas.

**Multiple-Unit.** A housing development that contains two or more residential units (See Section 21.06.390 (Dwelling, duplex.) and Section 21.06.410 (Dwelling, multiple family.))

**Objective Design Standard.** A standard that involves no personal or subjective judgment by a public official and is uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant and the public official prior to submittal.

**Parking Structure.** A wholly or partly enclosed structure, comprised of one or more stories, used exclusively for the parking and storage of vehicles. A parking structure may be totally below-grade or subterranean, partially above-grade, or totally above-grade.

**Reveal.** An inner surface of an opening or recess in a wall, typically in relation to a window or door.

**Roof, Gable.** A roof which slopes downward in two opposite directions from an upper, central ridge.

**Roof, Hip.** A roof which slopes downward in four directions from an upper, central point.

**Roof, Mansard.** A roof with a steep lower slope and flatter upper slope on all sides, either of convex or concave shape.

**Roof, Shed.** A roof which slopes downward in one direction and has no hips, ridges, or valleys.

**Street Facade.** The wall plane or facade of buildings facing a street, comprised of one or more contiguous buildings. Often used to describe a pedestrian-oriented environment.

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# General Plan Consistency Checklist

1. Project Title
2. Lead Agency Name and Address

County of Monterey
Housing and Community Development
1441 Schilling Place, 2nd Floor
Salinas, California 93901

3. Contact Person and Phone Number
4. Project Location
5. Project Sponsor's Name and Address
6. General Plan Designation
7. Zoning
8. Surrounding Land Uses and Setting
9. Project Description
10. Other Public Agencies Whose Approval is Required

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# Environmental Factors Potentially Affected

The project would potentially affect the environmental factors checked below with an impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" that was not studied in the prior EIR as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology and Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities and Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

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# Determination

Based on this initial evaluation:

☐ I find that the project WOULD NOT result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. Pursuant to CEQA Guidelines section 15183, the project is consistent with a Community Plan or Zoning. New effects would be substantially mitigated under uniformly applicable development policies or standards. NO FURTHER REVIEW is required.

☐ I find that the project WOULD result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. I find that FURTHER ENVIRONMENTAL REVIEW is necessary to analyze those effects that are subject to CEQA, and therefore, this project is not consistent with a Community Plan or Zoning pursuant to CEQA Guidelines Section 15183.

| Signature | Date |
|---|---|
| Printed Name | Title |

This report follows a checklist format that outlines performance standards for projects eligible for streamlined review under the California Environmental Quality Act (CEQA). A consistency checklist is prepared by a lead agency to streamline the environmental review process for eligible projects by limiting the topics subject to review at the project level where the effects of development have been addressed in a previous community plan. Pursuant to *CEQA Guidelines* Section 15183, if the project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to the effects that are subject to CEQA, the lead agency is to prepare an EIR if the written checklist shows that the effects of the project would be potentially significant.

To provide a thorough and conservative analysis of potential impacts associated with the modified project, this consistency checklist addresses all 20 environmental issue areas suggested by Append G of the *CEQA Guidelines*. This includes tribal cultural resources, an issue area added to the *CEQA Guidelines* in September 2016 pursuant to Assembly Bill 52, after certification of the County of Monterey's 2010 General Plan EIR. This also includes energy and wildfire, which were added to the *CEQA Guidelines* in December 2018.

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The checklist concludes that the project would not have any significant effects on the environment that either have not already been analyzed in a prior EIR or are more significant than previously analyzed, or that uniformly applicable development policies would not substantially mitigate. Pursuant to Public Resources Code Section 21094.5, such effects are exempt from CEQA regulations.

California Public Resources Code Section 21083.3 also limits the application of CEQA to effects on the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior environmental impact report, or which substantial new information shows will be more significant than described in the prior EIR when projects are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified (*CEQA Guidelines*, Section 15183[a], also Public Resources Code, Section 21083.3[b]: Exemption applies to "a development project [that] is consistent with the general plan of a local agency [if] an environmental impact report was certified with respect to that general plan.)

This *CEQA Guidelines* Section 15183 Consistency Checklist has been prepared pursuant to Public Resources Code Section 21000 et seq. and the *CEQA Guidelines*, California Code of Regulations Section 15000 et seq.

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# Environmental Checklist

Pursuant to *CEQA Guidelines* Section 15183, CEQA mandates that projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified may not require additional review unless there may be project-specific effects that are peculiar to the project or site that were not adequately addressed in the EIR for the 2010 General Plan. In approving a project meeting the requirements of Section 15183 of the *CEQA Guidelines*, a public agency shall limit its examination of environmental effects to those the agency determines, in an Initial Study or other analysis:

1. Are peculiar to the project or the parcel on which the project would be located
2. Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent
3. Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action
4. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The purpose of this checklist is to assess consistency between the project and 2010 General Plan and to compare the project with the effects above to determine if additional environmental review is required under CEQA in accordance with *CEQA Guidelines* Section 15183.

## *Section 15183 Format*

The table columns at the beginning of each resource section in the following analysis are used to document and categorize the environmental impacts of a proposed project in relation to prior environmental review and existing mitigation frameworks. The "Significant Impact" column identifies areas where the project may cause substantial adverse effects on the environment, potentially requiring additional analysis or mitigation. The "Less than Significant or Less than Significant with Mitigation Incorporated" column is used when impacts are either minor or can be reduced to a less than significant level through mitigation measures already identified and incorporated into the project design. The "No Impact" column confirms that the project would not affect the environmental resource in question.

The remaining columns support streamlined review pursuant to *CEQA Guidelines* Section 15183. The "Analyzed in the Prior EIR" column indicates that the impact was previously evaluated in a certified Environmental Impact Report, and no further analysis is needed unless new information or changed circumstances arise. The "Substantially Mitigated by Uniformly Applicable Development Policies" column is used when existing local policies or regulations, such as grading ordinances, California Building Code, or fire safety codes, are sufficient to reduce the impact to a less than significant level. These columns demonstrate that the project's impacts would be consistent with previous environmental review.

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# Relationship of the Project to Previous EIR Analysis

The County of Monterey adopted the 2010 General Plan on October 26, 2010. The 2010 General Plan includes goals and policies that address the existing and future land use for the large rural areas that are used predominantly for agricultural purposes as well as for the diversity of unincorporated communities. The 2010 General Plan also includes geographically smaller plans to provide more specific policies unique to particular geographical areas. The 2010 General Plan EIR was certified in 2010 and assessed impacts from implementation of the 2010 General Plan.

## Consistency of the Project with Adopted County Plans and Ordinances

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# 1 Aesthetics

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Except as provided in Public Resources Code Section 21099, would the project: | | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project have a substantial adverse effect on a scenic vista?*

*b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

*c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

*d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

## Conclusion

DRAFT

# 2 Agriculture and Forestry Resources

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☐ | ☐ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

*b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

*c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

*d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

*e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

## Conclusion

DRAFT

# 3 Air Quality

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

*b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

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## Conclusion

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# 4 Biological Resources

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☐ | ☐ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

*b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

*c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

*d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

*f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

## Conclusion

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# 5 Cultural Resources

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

*b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

*c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

## Conclusion

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# 6 Energy

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

## Conclusion

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# 7 Geology and Soils

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| 1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. Strong seismic ground shaking? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. Landslides? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☐ | ☐ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☐ | ☐ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

The nearest known potentially active fault line to the project site is the Chupines Fault, located

*a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

*a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

*a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

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*c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

*d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

*e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

*f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

## Conclusion

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# 8 Greenhouse Gas Emissions

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

## Conclusion

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# 9 Hazards and Hazardous Materials

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☐ | ☐ |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☐ | ☐ |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

*b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

*c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

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*d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

*e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

*g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

## Conclusion

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# 10 Hydrology and Water Quality

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | | |
| (i) Result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|---|
| (ii) | Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | ☐ | ☐ | ☐ | ☐ | ☐ |
| (iii) | Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☐ | ☐ | ☐ |
| (iv) | Impede or redirect flood flows? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☐ | ☐ |
| e. | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

*b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

*e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

*c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*

*c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

*c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

*c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

*d. Would the project risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone?*

## Conclusion

DRAFT

# 11 Land Use and Planning

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project physically divide an established community?*

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

## Conclusion

DRAFT

# 12 Mineral Resources

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

*b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

## Conclusion

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# 13 Noise

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project result in? | | | | | |
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people be residing, or working in the project area, to excessive noise levels? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

*c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing, or working in the project area, to excessive noise levels?*

## Conclusion

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# 14 Population and Housing

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Conclusion

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# 15 Public Services

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | | |
| 1 Fire protection? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2 Police protection? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3 Schools? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4 Parks? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5 Other public facilities? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental*

*impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

## Conclusion

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# 16 Recreation

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

*b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

## Conclusion

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# 17 Transportation

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☐ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

*b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

*c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

*d. Would the project result in inadequate emergency access?*

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## Conclusion

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# 18 Tribal Cultural Resources

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | | |
| a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

*b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

On October 18, 2024, the following Native American tribal groups were formally notified that the

## Conclusion

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# 19 Utilities and Service Systems

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☐ | ☐ | ☐ |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

*b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

*c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

*d. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

*e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

## Conclusion

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# 20 Wildfire

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | | |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☐ | ☐ |

## Analysis in Previous Environmental Documents

## Project-specific Impacts

*a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

*b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

*c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

*d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

## Conclusion

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# 21 Mandatory Findings of Significance

| | Significant Impact | Less than Significant or Less than Significant with Mitigation Incorporated | No Impact | Analyzed in the Prior EIR | Substantially Mitigated by Uniformly Applicable Development Policies |
|---|---|---|---|---|---|
| Does the project: | | | | | |
| a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☐ | ☐ | ☐ |
| b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☐ | ☐ | ☐ |
| c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☐ | ☐ | ☐ |

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## Project-specific Impacts

*a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

*b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

*c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

## Conclusion

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# References

Bibliography

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Harris & Associates

# AIR QUALITY TECHNICAL MEMORANDUM

**To:** County of Monterey
**From:** Sharon Toland, AICP, Senior Technical Specialist, Analyst, Harris & Associates
**RE:** **Air Quality Technical Memorandum for the County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update**
**Date:** July 13, 2026
**CC:** Darin Neufeld, AICP, Director, Environmental + Planning Consulting, and Elizabeth Kim, Senior Project Manager, Harris & Associates
**Att:** 1, CalEEMod Results; 2, Mobile Emissions Calculations

## Introduction

This memorandum provides the results of Harris & Associates' analysis of the potential air quality impacts from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). Regional access to Monterey County (unincorporated and incorporated geographical area) is provided by the U.S. Route 101 traveling north–south and State Route (SR-) 198 and SR-146 running east–west. SR-1 also provides regional access along the Pacific coastline and SR-218, SR-68, and SR-183 are other major roadways serving Monterey County.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

For the purposes of this analysis, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

The UMC is divided into seven sub-areas: North County, Greater Salinas, Central Salinas Valley, Greater Monterey Peninsula, Toro, Cachagua, and South County. Additionally, two master plans have been adopted within the Greater Monterey Peninsula Area Plan, the Carmel Valley Master Plan and the Fort Ord Master Plan, and the County's Local Coastal Program consists of four planning areas: North County (Coastal), Del Monte Forest, Carmel Area, and Big Sur Coast.

The HEU6 includes the capacity for at least 5,897 residential units, comprising opportunity sites (4,434 units), pipeline sites (1,117 units), and accessory dwelling units (ADUs; 346 units). Pipeline sites are sites where housing has been proposed and/or entitled and where development is expected to receive a building permit or certificate

of occupancy. ADUs would involve additional units on existing housing sites. For California Environmental Quality Act (CEQA) analysis, this Air Quality Technical Memorandum assumes both the theoretical maximum capacity of 12,497 new housing units on 56 opportunity sites, and the reasonable development capacity of 4,434 units for construction and 4,910 units for operation on the 56 opportunity sites is provided for comparison and informational purposes.

## Air Quality Analysis Background

Air quality laws and regulations have historically divided air pollutants into two broad categories: criteria air pollutants and non-criteria air pollutants, or toxic air contaminants. The purpose of this memorandum is to evaluate the potential criteria air pollutant impacts of the project. Criteria air pollutants are a group of common air pollutants regulated by federal and state governments through ambient air quality standards based on criteria regarding the health and environmental effects of pollution. The criteria air pollutants pertinent to the analysis in this memorandum are carbon monoxide (CO), nitrogen oxides ($NO_x$), ozone ($O_3$), particulate matter (particulate matter measuring no more than 10 microns in diameter [$PM_{10}$] and particulate matter measuring no more than 2.5 microns in diameter [$PM_{2.5}$]), and sulfur dioxide ($SO_2$). The following describes the health effects of these criteria air pollutants.

### Carbon Monoxide

CO is a colorless, odorless, poisonous gas produced by combustion processes, primarily mobile sources. When CO gets into the body, it combines with chemicals in the blood and prevents blood from providing oxygen to cells, tissues, and organs. Because the body requires oxygen for energy, high-level exposure to CO can cause serious health effects, including death (USEPA 2024a).

### Nitrogen Oxides

$NO_x$ is a general term pertaining to compounds including nitric oxide (NO), nitrogen dioxide ($NO_2$), and other $NO_x$. $NO_x$ is produced from burning fuels, including gasoline, diesel, and coal. $NO_x$ reacts with volatile organic compounds (VOCs) to form ground-level $O_3$ (smog). $NO_x$ is linked to a number of adverse respiratory system effects (USEPA 2024b).

### Ozone

Ground-level $O_3$ is not emitted directly into the air but is formed by chemical reactions of “precursor“ pollutants ($NO_x$ and VOCs) in the presence of sunlight. Major emission sources include $NO_x$ and VOC emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents. $O_3$ can trigger various health problems, particularly for sensitive receptors, including children, older adults, and people of all ages who have lung diseases, such as asthma (USEPA 2024c).

### Particulate Matter

Particulate matter includes dust, metals, organic compounds, and other tiny particles of solid materials that are released into and move around in the air. Particulates are produced by many sources, including the burning of diesel fuel by trucks and buses, industrial processes, fires, and windblown dust. Particulate pollution can cause nose and throat irritation and heart and lung problems. Particulate matter is measured in microns, which are 1 millionth of 1 meter in length (or 1 thousandth of 1 millimeter). $PM_{10}$ is small (i.e., respirable) particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter (CARB 2025a).

### Sulfur Dioxide

$SO_2$ is formed primarily by the combustion of sulfur-containing fossil fuels, especially at power plants and industrial facilities. $SO_2$ is linked to a number of adverse effects on the respiratory system (USEPA 2025a).

## Existing Ambient Air Quality

The UMC is within the North Central Coast Air Basin (NCCAB). The Monterey Bay Air Resources District (MBARD) manages air quality in the NCCAB. The MBARD operates a network of ambient air monitoring stations throughout the NCCAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). There are three monitoring stations in the Monterey County. Given that opportunity sites are in different regions of the UMC, distances between monitoring stations and opportunity sites vary. As such, data for each of the three air monitoring stations is listed below.

Monitoring stations closest to opportunity sites include the Salinas station on 855 East Laurel Drive in the City of Salinas, which measures $O_3$, CO, $NO_2$ and $PM_{2.5}$; the Carmel Valley monitoring station on 34 Ford Road in Carmel Valley, which measures $O_3$, CO, $NO_2$ and $PM_{2.5}$; and the King City monitoring station on 415 Pearl Street in King City, which measures $O_3$, $PM_{10}$, and $PM_{2.5}$ concentrations. Concentrations of monitored pollutants for $O_3$, $NO_2$, $PM_{10}$, and $PM_{2.5}$ are presented in Table 1, Monitored Ambient Air Quality at the Salinas Monitoring Station; Table 2, Monitored Ambient Air Quality at the Carmel Valley Monitoring Station; and Table 3, Monitored Ambient Air Quality at the King City monitoring station.

Concentrations of 1-hour and 8-hour $O_3$ did not exceed CAAQS in 2021, 2022, or 2023. The monitored 24-hour $PM_{2.5}$ values were exceeded in 2023 at the Salinas monitoring station. The monitored 24-hour $PM_{10}$ CAAQS were exceeded in 2021, 2022, and 2023. The 1-hour and annual NAAQS and CAAQS for $NO_2$ were not exceeded. No CO data or $SO_2$ data is available from monitoring sites in Monterey County.

**Table 1. Monitored Ambient Air Quality at the Salinas Monitoring Station**

| Pollutant | Standard | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **$O_3$** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.064 | 0.057 | 0.064 |
| Number of days exceeded | State: > 0.12 ppm | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | 0.057 | 0.052 | 0.056 |
| Number of days exceeded | State: > 0.07 ppm | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | 0 | 0 | 0 |
| **$PM_{2.5}$** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 19.7 | 23.8 | 41.1 |
| Number of days exceeded | Federal: > 35 µg/m$^3$ | 0 | 0 | 1 |
| Annual arithmetic average concentration (µg/m$^3$) | | 4.8 | 5.1 | 7.7 |
| Exceeded for the year | State: > 12 µg/m$^3$ | No | No | No |
| | Federal: > 15 µg/m$^3$ | No | No | No |
| **$NO_2$** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.027 | 0.030 | 0.031 |
| Number of days exceeded | State: > 0.18 ppm | 0 | 0 | 0 |
| Annual arithmetic average concentration (ppm) | | 0.003 | [a] | 0.003 |
| Exceeded for the year | State: > 0.030 ppm | No | No | No |
| | Federal: > 0.053 ppm | No | No | No |

**Source:** CARB 2025b.
**Notes:** µg/m$^3$ = micrograms per cubic meter; $NO_2$ = nitrogen dioxide; $O_3$ = ozone; $PM_{2.5}$ = particulate matter smaller than or equal to 2.5 microns in diameter; ppm = parts per million
Opportunity Sites 1 through 15, 24 through 29, 30, 31, 39, 41, 44 and 48 through 51, and 64 are closest to the Salinas monitoring station.
[a] = indicates that there was insufficient data to determine the value

**Table 2. Monitored Ambient Air Quality at the Carmel Valley Monitoring Station**

| Pollutant | Standard | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **$O_3$** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.065 | 0.060 | 0.075 |
| Number of days exceeded | State: > 0.12 ppm | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | 0.062 | 0.052 | 0.055 |
| Number of days exceeded | State: > 0.07 ppm | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | 0 | 0 | 0 |
| **$PM_{2.5}$** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 13.1 | 13.7 | 22.0 |
| Number of days exceeded | Federal: > 35 µg/m$^3$ | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 3.5 | 3.5 | 4.0 |
| Exceeded for the year | State: > 12 µg/m$^3$ | No | No | No |
| | Federal: > 15 µg/m$^3$ | No | No | No |

**Source:** CARB 2025b.
**Notes:** µg/m$^3$ = micrograms per cubic meter; $O_3$ = ozone; $PM_{2.5}$ = particulate matter smaller than or equal to 2.5 microns in diameter; ppm = parts per million
Opportunity Sites 16 through 23, 35 through 38, 40, 43, 45 through 47, and 53 through 56 are closest to the Carmel Valley monitoring station.

**Table 3. Monitored Ambient Air Quality at the King City Monitoring Station**

| Pollutant | Standard | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| **$O_3$** | | | | |
| Maximum 1-hour concentration (ppm) | | 0.078 | 0.070 | 0.063 |
| Number of days exceeded | State: > 0.12 ppm | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | 0.064 | 0.057 | 0.057 |
| Number of days exceeded | State: > 0.07 ppm | 0 | 0 | 0 |
| | Federal: > 0.07 ppm | 0 | 0 | 0 |
| **$PM_{2.5}$** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 19.3 | 24.4 | 35.4 |
| Number of days exceeded | Federal: > 35 µg/m$^3$ | 0 | 0 | 0 |
| Annual arithmetic average concentration (µg/m$^3$) | | 6.6 | 5.1 | 4.5 |
| Exceeded for the year | State: > 12 µg/m$^3$ | No | No | No |
| | Federal: > 15 µg/m$^3$ | No | No | No |
| **$PM_{10}$** | | | | |
| Maximum 24-hour concentration (µg/m$^3$) | | 94.9 | 64.5 | 84.7 |
| Number of days exceeded | State: > 50 µg/m$^3$ | 13 | 16 | 7 |
| | Federal: > 150 µg/m$^3$ | 0 | 0 | 0 |

**Source:** CARB 2025b.
**Notes:** µg/m$^3$ = micrograms per cubic meter; $O_3$ = ozone; $PM_{2.5}$ = particulate matter smaller than or equal to 2.5 microns in diameter $PM_{10}$ = particulate matter smaller than or equal to 10 microns in diameter; ppm = parts per million
Opportunity Sites 32 through 34, and 42 are closest to the King City monitoring station.

# Regulatory Setting

## Federal and State

The federal Clean Air Act (CAA) of 1970 required the U.S. Environmental Protection Agency (USEPA) to establish the NAAQS while retaining the option for states to adopt more stringent standards or to include other specific pollutants. The NAAQS were developed for six criteria air pollutants: $O_3$, $NO_2$, CO, $SO_2$, particulate matter, and lead. The 1990 CAA Amendments require each state to have an Air Pollution Control Plan called a State Implementation Plan. A State Implementation Plan includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The 1990 CAA Amendments dictate that states containing areas violating the NAAQS revise their State Implementation Plans to include extra control measures to reduce air pollution. The USEPA reviews the State Implementation Plans to determine whether the plans conform to the 1990 CAA Amendments and achieve the established air quality goals.

The USEPA has classified air basins (or portions thereof) as being in "attainment," in "non-attainment," or "unclassified" for each criteria air pollutant based on whether the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data was available as a basis for a non-attainment or attainment designation. Table 4, North Central Coast Air Basin Attainment Status, lists the attainment status of the NCCAB for the criteria air pollutants. The USEPA classifies the NCCAB as in attainment with criteria air pollutants with respect to the NAAQS. The State of California, under the California CAA, established standards for criteria air pollutants that are generally stricter than federal standards. As shown in Table 4, the NCCAB is currently in state non-attainment status for $PM_{10}$.

**Table 4. North Central Coast Air Basin Attainment Status**

| Pollutant | California Standards | Federal Standards |
|---|---|---|
| $O_3$ (1-Hour) | Attainment | Attainment |
| $O_3$ (8-Hour) | Attainment | Attainment |
| $PM_{10}$ | **Non-attainment** | Attainment |
| $PM_{2.5}$ | Attainment | Attainment |
| CO | Monterey County – Attainment<br>San Benito County – Unclassified[a]<br>Santa Cruz County – Unclassified[a] | Attainment |
| $NO_2$ | Attainment | Attainment |
| Lead | Attainment | Attainment |
| $SO_2$ | Attainment | Attainment |

**Source:** MBARD 2024.

**Notes:** CO = carbon monoxide; $NO_2$ = nitrogen dioxide; $O_3$ = ozone; $PM_{10}$ = particulate matter smaller than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter smaller than or equal to 2.5 microns in diameter; $SO_2$ = sulfur dioxide

[a] = Unclassified; indicates that data is not sufficient for determining attainment or non-attainment.

## Local

### Monterey Bay Air Resources District

The MBARD has jurisdiction over air quality programs in Monterey County, Santa Cruz County, and San Benito County. State and local government projects, as well as projects proposed by the private sector, are subject to MBARD requirements if the sources are regulated by the MBARD (MBARD 2025).

The MBARD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Development projects in the UMC are typically subject to the following MBARD rules; other rules may apply depending on the proposed specific operations:

- **Rule 402, Nuisance.** Prohibits emissions that may cause injury, detriment, nuisance, or annoyance to any considerable number of people or to the public; endanger the comfort, repose, health, or safety of any such people or the public; or cause injury or damage to business or property.
- **Rule 403, Particulate Matter.** Establishes limits to the discharge of any particulate matter from non-stationary sources.
- **Rule 425, Use of Cutback Asphalt.** Established limits for the manufacture and use of high-VOC asphalt, including cutback, slow cure, and emulsified asphalt.
- **Rule 426, Architectural Coatings.** Establishes limits to the VOC content for coatings applied in the MBARD.

## 2010 General Plan (Inland)

***Conservation and Open Space Element***

Goal OS-10 and Policies OS-10.1 through OS-10.15 of the Conservation and Open Space Element of the Monterey County General Plan (2010 General Plan) calls for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities. Policy OS-10.7 supports the use of best available technology for reducing air pollution emissions. Policy OS-10.8 is intended to protect air quality from naturally occurring asbestos by requiring mitigation measures to control dust and emissions during construction, grading, quarrying, or surface mining operations.

***Circulation Element***

The Circulation Element includes goals and policies related to achieving an acceptable level of service (LOS) of LOS D by 2030 for County roads and intersections (Policy C-1.1). Policy C-1.2 outlines ways in which the goal of Policy C-1.1 could be achieved. Policy C-1.3 requires circulation improvements that reduce direct on- and off-site project traffic impacts to be provided concurrently with new development. Policy C-1.4 requires projects that would reduce LOS below LOS D to phase construction in a manner that maintains the acceptable LOS D for all affected UMC roads. Circulation Element policies that encourage alternative transportation would reduce criteria air pollutant emissions from mobile sources. For example, Policy C-2.6 encourages bicycle and automobile storage facilities in conjunction with public transportation facilities. Policy C-3.5 encourages transportation alternatives such as bicycles, carpools, public transit, and compact vehicles within and outside the public right-of-way. Policy C-4.3 requires consideration of the needs of bicyclists and pedestrians in all public rights-of-way. Policy C-4.5 requires new public local and collector roads to be and designed to minimize disruption of existing development, discourage through auto traffic and provide for bicycle and pedestrian traffic within the right-of-way. Policy C-6.5 encourages use of public transit and alternative modes of transportation through land use designations and zoning which cluster employment centers with a mix of other uses, and project design that incorporates carpool areas, "park-and-ride" facilities and similar incentives. Policy C-9.2 requires construction or expansion of roadways within major transportation corridors to consider improved bike routes. Policy C-9.3 requires the County to promote the safe integration of bicycle systems with other public transportation modes. Policy C-9.6 requires new and improved multimodal transfer facilities, such as transit centers and park-and-ride lots, to include adequate bicycle access and secure bicycle parking facilities.

***Environmental Justice Element***

The County is currently in the process preparing a new Environmental Justice Element. The purpose of the Environmental Justice Element is to establish goals and policies intended to mitigate inequities for people who are disproportionately impacted by environmental hazards and health impacts. The Draft Environmental Justic Element includes policies focused on reducing exposure to toxic air contaminants, specifically diesel particulate matter and stationary sources from industrial activities. Draft Policy EJ-2.1 is to maintain and improve both indoor and outdoor air quality by identifying the sources of air pollution impacting disadvantaged communities and vulnerable populations and reducing emissions from these sources. Draft Policy EJ-2.2 is to coordinate with regional agencies to require stronger pollution controls at industrial and agricultural facilities in or near disadvantaged communities, to the extent feasible, and minimize the risk of exposure to, or contamination by, hazardous materials, prioritizing facilities in northern areas of Monterey County. Draft Policy EJ-2.3 is to expand

programs and partnerships to inform and educate disadvantaged communities and vulnerable citizens about adverse health impacts associated with poor indoor and outdoor air quality, and direct resources toward programs to provide equipment and supplies to protect residents' and workers' health and safety.

## Monterey County Community Climate Action and Adaptation Plan

The County is currently preparing a Community Climate Action and Adaptation Plan (CCAAP). A draft of the CCAAP was released to the public in April 2026 (County of Monterey 2026). The CCAAP is an effort to reduce greenhouse gas (GHG) emissions in line with the targets set by the State of California through 2045. Strategies to reduce GHG emissions include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation, including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. Although the purpose of the CCAAP is reducing GHG emissions, the CCAAP strategies would result in a co-benefit of reducing criteria air pollutant emissions from energy and transportation.

## Area and Master Plans

### *Carmel Valley Master Plan*

To explore public transit as an alternative to the use of private automobiles and help preserve air quality, Policy CV-2.1 requires new development to include a road system adequate not only for its internally generated automobile traffic but also for bus (both transit and school), pedestrian, and bicycle traffic, which should logically pass through or be generated by the development.

### *Fort Ord Master Plan*

Objective A, Air Quality Policies A-1 through A-3, the programs thereunder support the protection of and improvements to air quality. Specifically, Air Quality Policy A-1 calls on the County to participate in regional planning efforts to improve air quality, such as continuing to cooperate with the MBARD in carrying out the regional Air Quality Management Plan and with the Transportation Agency of Monterey County to carry out the Congestion Management Plan (Programs A-1.1 and A-1.2). Air Quality Policy A-2 calls on the County to promote local efforts to improve air quality, such as avoiding or mitigating air quality impacts through the CEQA process and using the Transportation Demand Management Ordinance and similar transportation measures to encourage commute alternatives (Programs A-2.1 and A-2.2). Air Quality Policy A-1 and Programs A-3.1 and A-3.2 promote the integration of efficient land use strategies into planning and zoning to improve air quality. These include, but are not limited to, the enhancement of Central Business Districts, compact development patterns, residential densities that average above seven dwelling units per acre, clustered employment densities and activity centers, mixed use development, and integrated street patterns.

### *Toro Area Plan*

Policy T-2.10 states that increasing the accessibility of Toro residents to mass transit, either through maintenance of existing park-and-ride lots or new bus service, particularly in the Corral de Tierra, San Benancio, and River Road areas, should be studied and implemented.

### *Greater Monterey Peninsula Area Plan*

Policy GMP-2.9 encourages construction and expansion of all highways and major arterials to provide for bike paths, and states that it is desirable that bike paths be physically separate from motorized traffic.

## Community Plans

### *Castroville Community Plan*

The Castroville Community Plan Program Environmental Impact Report (PEIR) includes the following mitigation measures related to air quality that are required to be incorporated into the design of future development as necessary:

- Implement best-available control measures (BACM) to reduce emissions of particulate matter, as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan during construction activities.

- Implement BACM to reduce emissions of toxic air contaminants, as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan during construction activities.
- Implement BACM to reduce criteria air pollutants of ROG [reactive organic gas], $NO_X$ [oxides of nitrogen], CO and $PM_{10}$ as recommended by MBARD and in accordance with Policy 20.2.5 of the 1982 General Plan 1982, during operations.

***North County Land Use Plan***

Land Use Plan Key Policy 3.1.1 focuses on uncongested flow of traffic but states that public transportation should be expanded to provide a viable transportation alternative.

***Carmel Area Land Use Plan***

Recommended Action 3.1.4 encourages initiation of a program by Monterey Peninsula Transit or other public carriers, in cooperation with appropriate recreational agencies, the County, and community representatives, to provide bus stops at appropriate access points and to expand bus service to recreation areas and visitor-serving facilities. Bus routes should be scheduled to serve residents' needs as well as the needs of visitors.

**1982 General Plan (Coastal)**

Goal 20 and the objectives and policies thereunder aim to provide for the protection and enhancement of Monterey County's air quality through land use planning (Objective 20.1 and Policies 20.1.1 through 20.1.5) and regulating pollution sources and adopting programs to improve air quality (Objective 20.2 and Policies 20.2.1 through 20.2.7).

Goal 37 and the objectives and policies thereunder aim to promote a safe, effective, and economical transportation system that will service the existing and future land uses of Monterey County. It includes Policy 37.2.1 that requires transportation demands of proposed development to not exceed an acceptable LOS for existing transportation facilities, unless appropriate increases in capacities are provided for; Policy 37.4.1 that requires the County to encourage overall land use patterns that reduce the need to travel; and Policy 37.4.2 that encourages the provision, where feasible, of bicycle and automobile storage facilities to be used in conjunction with public transportation.

Goal 38 aims to minimize the negative impacts of transportation in Monterey County. Objective 38.1 is to plan for transportation modes and strategies that ensure good air quality, reduce noise, reduce the consumption of fossil fuels, and reduce the need to devote additional lands to transportation use, and Policy 38.1.1 requires the County to support the implementation of measures for reducing air pollution from transportation sources.

## Significance Thresholds

Appendix G of the CEQA Guidelines states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make impact determinations. The County has not adopted significance thresholds to evaluate the significance of air quality impacts once a report has been deemed necessary. In lieu of any set quantitative air quality significance thresholds, the thresholds outlined in the MBARD's CEQA Air Quality Guidelines are used to determine the potential significance of air quality impacts. According to MBARD, potential local air quality impacts would occur if a project would generate 82 pounds per day or more of $PM_{10}$ during construction activities. Quantitative thresholds for construction emissions of $PM_{2.5}$, $NO_x$, $SO_x$, CO, and VOCs have not been adopted by MBARD. Instead, emissions of $PM_{2.5}$, $NO_x$, $SO_x$, CO, and VOCs that would result during construction are evaluated qualitatively for potential air quality impacts based on guidance from MBARD. Table 5, Significance Thresholds for Air Quality Impacts, provides the applicable MBARD thresholds for project operation.

**Table 5. Significance Thresholds for Operational Air Quality Impacts**

| Pollutant | Emission Rate (pounds/day) |
|---|---|
| $PM_{10}$ | 82 |
| $PM_{2.5}$ | 55 |
| $NO_X$ | 137 |
| $SO_X$ | 150 |
| CO | 550 |
| VOC | 137 |

**Sources:** MBARD 2008.
**Notes:** CO = carbon monoxide; $NO_X$ = nitrogen oxides; $PM_{10}$ = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns; $SO_X$ = oxides of sulfur oxides; VOC = volatile organic compounds

The thresholds listed in Table 5 represent screening level thresholds that can be used to evaluate if project-related emissions cause a significant impact on air quality. Emissions below the screening level thresholds do not cause a significant impact. For non-attainment pollutants ($O_3$, with $O_3$ precursors $NO_x$ and VOCs, and $PM_{10}$), if emissions exceed the thresholds in Table 5, the HEU6 would result in a cumulatively considerable net increase in these pollutants and, thus, would have a significant impact on ambient air quality.

## Construction Impact Analysis

Construction of future projects under the HEU6 would result in temporary air pollutants associated with soil disturbance, dust emissions, employee and material delivery vehicle exhaust, off-gassing from paving and coating activities, and combustion pollutants from off-road construction equipment. Construction-related air pollution emissions can vary from day to day, depending on the level of activity, type of activity, and prevailing weather conditions. The primary air pollutants of concern from construction activities are particulate matter (including both $PM_{10}$ and $PM_{2.5}$), CO, and $O_3$ precursors (including $NO_x$ and VOCs).

Maximum daily construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. The project is a land use policy plan and does not propose any specific construction projects, and the details of future construction under the HEU6 are currently unknown. Therefore, estimated maximum daily construction emissions were estimated using CalEEMod default assumptions. Mobile emissions typically account for the majority of land development emissions. As such, air quality modeling includes evaluation of the theoretical maximum buildout capacity of 12,497 units, consistent with the assumptions of the vehicle miles traveled (VMT) analysis (Kimley-Horn 2026). However, development of 12,497 new housing units is not supported by historical building trends nor would it align with market demand in the UMC. Therefore, a modeling scenario that assumes a reasonable capacity of 4,434 housing units is also provided for informational and comparison purposes.

Modeling assumes a buildout planning year of 2031. The recommended default assumption of 600 tons of export material per acre and 1,190 tons of import per acre was used to estimate total earthwork and demolition export for the project, based on the CalEEMod estimate for total project acreage (Ramboll 2023). Modeling assumes dust control measures would be implemented as required by MBARD Rule 402 and Rule 403. Dust control measures include watering on site two times per day, application of dust suppressant to unpaved roads, limits on vehicle speeds, and sweeping of paved roads. These assumptions were made for the theoretical maximum buildout capacity of 12,497 housing units and a more reasonable buildout scenario of 4,434 housing units as approved by the California Department of Housing and Community Development. Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results. Estimated maximum daily construction emissions for the theoretical maximum total capacity of 12,497 new housing units are provided in Table 6, Estimated Theoretical Capacity Maximum Daily Construction Emissions (pounds/day). Table 7, Reasonable Capacity Estimated Average Daily Construction Emissions (pounds/day) provides maximum daily construction emissions for the net increase in units under the reasonable capacity scenario (4,434 units).

**Table 6. Estimated Theoretical Capacity Maximum Daily Construction Emissions (pounds/day)**

| Construction Phase | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Demolition | 3 | 27 | 24 | <1 | 1 | 1 |
| Site Preparation | 3 | 29 | 30 | <1 | 9 | 5 |
| Grading | 3 | 39 | 33 | <1 | 7 | 3 |
| Building Construction | 51 | 90 | 509 | <1 | 68 | 17 |
| Architectural Coating | 408 | 5 | 67 | <1 | 12 | 3 |
| Paving | 1 | 7 | 10 | <1 | <1 | <1 |
| *MBARD Threshold*[a] | — | — | — | — | *82* | — |
| **Significant?** | — | — | — | — | No | — |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** CO = carbon monoxide; $NO_x$ = oxides of nitrogen; $PM_{10}$ = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compounds
[a] MBARD has only adopted a numeric threshold for $PM_{10}$ for construction emissions. Emissions for other pollutants are provided for informational purposes.

**Table 7. Reasonable Capacity Estimated Maximum Daily Construction Emissions (pounds/day)**

| Construction Phase | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Demolition | 3 | 27 | 24 | <1 | 1 | 1 |
| Site Preparation | 4 | 36 | 34 | <1 | 9 | 5 |
| Grading | 4 | 46 | 35 | <1 | 7 | 4 |
| Building Construction | 19 | 40 | 189 | <1 | 24 | 6 |
| Architectural Coating | 381 | 2 | 23 | <1 | 4 | 1 |
| Paving | 1 | 7 | 10 | <1 | <1 | <1 |
| *MBARD Threshold*[1] | — | — | — | — | *82* | — |
| **Significant?** | — | — | — | — | No | — |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** CO = carbon monoxide; $NO_x$ = oxides of nitrogen; $PM_{10}$ = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compounds
[a] MBARD has only adopted a numeric threshold for $PM_{10}$ for construction emissions. Emissions for other pollutants are provided for informational purposes.

As shown in Table 6 and Table 7, maximum emissions estimates indicate that construction activities anticipated under the HEU6 would not result in significant levels of $PM_{10}$ air emissions. These maximum emissions assume the most intense construction that would be required for concurrent construction of all housing units accommodated under the plan. In reality, various construction phases would occur on a smaller scale throughout the UMC on a given day. Because future housing development would occur throughout the UMC and over the multi-year planning period, it is unlikely that development of multiple projects would occur in the same area simultaneously such that individual construction activities would combine to exceed the MBARD $PM_{10}$ threshold. Under the reasonable capacity scenario, even if building construction at two adjacent opportunity sites would occur simultaneously, combined emissions would not exceed the $PM_{10}$ threshold. As previously described, it is highly unlikely that the level of construction assumed for the theoretical maximum capacity scenario would occur during the HEU6 planning period. The greatest contributor to $PM_{10}$ emissions during building construction is personal vehicle trips associated with construction workers. CalEEMod estimates these trips based on the total number of dwelling units input for the theoretical maximum capacity, resulting in a default assumption of almost 9,000 daily vehicle trips associated with worker trips under this scenario (refer to Attachment 1). A combined construction scenario requiring more than the approximately 9,000 daily workers trips modeled for the maximum capacity scenario would not occur. Therefore, similar to the reasonable capacity scenario, emissions are unlikely to combine to exceed the MBARD threshold under the maximum capacity scenario.

As previously mentioned, the MBARD does not identify quantitative thresholds for other criteria air pollutants during construction. Based on MBARD guidance, construction projects in the NCCAB that would use typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders, are considered to be accommodated in the emission inventories of state- and federally required air plans and are assumed not to have a significant impact on the attainment and maintenance of $O_3$ AAQS. Construction details, including the equipment needed, for projects completed under the HEU6 is not known at this time. However, construction is anticipated to require only construction equipment typical of residential development projects. The identified opportunity area and pipeline sites do not include features that would require unusual equipment, such as a remote location requiring use of helicopter material delivery. Additionally, the timing of most projects would be spaced out over the Sixth Cycle buildout period (5 years remaining until 2031), and emissions would be released periodically throughout the buildout period. Individual project emissions would generally not exceed the estimated daily average emissions shown in Table 6. It should also be noted that these results reflect default modeling assumptions for the total amount of growth accommodated by the HEU6 under the theoretical maximum capacity and reasonable capacity scenarios rather than an actual construction project. While project-specific details are not known at this time, projects under the HEU6 would be required to comply with MBARD Rule 426, which establishes limits to the VOC content for architectural coatings. Projects under the HEU6 would incorporate dust control measures, as described above (i.e., MBARD Rule 402 and Rule 403). Compliance with MBARD Rule 426 and implementation of the dust control measures would reduce fugitive dust emissions from ground disturbance and VOC emissions associated with architectural coatings for projects implemented under the HEU6. As such, construction of future development consistent with the project would not result in significant criteria air pollutant emissions during construction, and impacts would be less than significant.

## Operational Impact Analysis

Long-term air pollutant emissions impacts are those associated with stationary sources and mobile sources involving any project-related changes. Stationary sources of emissions include the use of architectural coatings, consumer products, landscape equipment, and energy use. Area sources of air pollutant emissions associated with future development under the HEU6 include fuel combustion emissions from space and water heating, fuel combustion emissions from landscape maintenance equipment, VOC emissions from periodic repainting of interior and exterior surfaces, and natural gas use. Increased traffic volumes also contribute to regional emissions of criteria air pollutants.

The net increase in estimated operational emissions from implementation of the HEU6 was calculated using CalEEMod (Version 2022.1) for emission sources other than mobile emissions using default assumptions for residential development. As described above, modeling includes a theoretical maximum development capacity scenario of 12,497 units, and a reasonable capacity scenario of 4,910 housing units. The 4,910-unit scenario and associated VMT data were derived from a previous iteration of the traffic model prior to project revisions. This VMT estimate closely aligns with the current reasonable buildout scenario of 4,434 housing units and provides a conservative assumption for mobile emissions. This scenario is provided only for comparison and informational purposes only. Operational impact finding is based on the theoretical maximum buildout capacity scenario. CalEEMod default assumptions include natural gas hearths for new residential units. Energy use estimates are conservative because CalEEMod assumes compliance with 2019 Title 24 energy efficiency standards. Residential development would be required to comply with increasingly stringent Title 24 Standards, including the current 2022 standards. Estimated maximum daily operational emissions are provided in Table 8, Theoretical Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day). Maximum daily emissions under the reasonable capacity scenario are provided in Table 9, Reasonable Capacity Maximum Daily Net Change in Project Operational Emissions (pounds/day).

Development would also generate mobile source emissions from motor vehicle trips. The project does not propose any specific future development projects. The project's impact on regional emissions related to vehicle emissions is based on its impact on Monterey Countywide VMT data for buildout (2031) conditions from Kimley-Horn (2026). Criteria air pollutant emissions associated with the project's increase in VMT were calculated using

the EMFAC2025 (V2.1.0) Emissions Inventory (refer to Attachment 2, Mobile Emissions Calculations). EMFAC2025 V2.1.0 reflects federal actions to disapprove the USEPA's actions to grant California waivers for several regulations in the model, including Advanced Clean Cars II, Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions (Warranty Phase 1), and Heavy-Duty Omnibus (Omnibus), although these actions are being contested by the state (CARB 2026a). Existing Monterey Countywide VMT is approximately 3,267,663 and is estimated to increase to 3,968,469 by 2031 without project implementation. For informational purposes, a Monterey Countywide VMT estimate of 4,174,693 VMT provided by Kimley-Horn for the development of up to 4,910 units was used to estimate emissions under a conservative reasonable buildout scenario for vehicle emissions (Kimley-Horn 2024). The 4,910-unit scenario and associated VMT data were derived from a previous iteration of the traffic model prior to project revisions. This VMT estimate closely aligns with the current reasonable buildout scenario of 4,434 housing units and provides a conservative assumption for mobile emissions. The net increase in regional mobile emissions attributable to the project in 2031 is shown in Table 8.

**Table 8. Theoretical Capacity Maximum Daily Net Change in Project Operational Emissions**

| Source | Air Pollutant Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Area | 376 | 7 | 707 | <0.1 | <1 | <1 |
| Energy | 7 | 126 | 54 | 0 | 10 | 10 |
| Mobile | 146 | 140 | 2,356 | 1 | 20 | 8 |
| **Total Daily Emissions** | **529** | **273** | **3,117** | **1** | **30** | **18** |
| *MBARD Threshold* | *137* | *137* | *550* | *150* | *82* | *55* |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **No** | **No** |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** CO = carbon monoxide; $NO_x$ = nitrogen oxides; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; $PM_{10}$ = particulate matter measuring no more than 10 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compound

**Table 9. Reasonable Capacity Maximum Daily Net Change in Project Operational Emissions**

| Source | Air Pollutant Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Area | 133 | 2 | 251 | <0.1 | <1 | <1 |
| Energy | 3 | 45 | 19 | <1 | 4 | 4 |
| Mobile | 97 | 93 | 1,573 | 1 | 13 | 5 |
| **Total Daily Emissions** | **233** | **140** | **1,843** | **1** | **17** | **9** |
| *MBARD Threshold* | *137* | *137* | *550* | *150* | *82* | *55* |
| **Significant?** | **Yes** | **Yes** | **Yes** | **No** | **No** | **No** |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** CO = carbon monoxide; $NO_x$ = nitrogen oxides; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; $PM_{10}$ = particulate matter measuring no more than 10 microns in diameter; $SO_x$ = sulfur oxides; VOC = volatile organic compound

As shown in Table 8 and Table 9, operational emissions for HEU6 buildout would generally not exceed the MBARD thresholds for $SO_X$, $PM_{10}$, and $PM_{2.5}$. However, operational emissions would exceed MBARD thresholds for VOC, $NO_x$, and CO emissions, mainly attributed to mobile emissions and area source emissions from application of consumer products. As such, the project would have the potential to contribute to the existing significant cumulative impact related to $O_3$. Although details of individual projects are not currently known, based on the default assumptions for residential development in CalEEMod (Version 2022.1) and EMFAC025 V2.1.0, this impact would be potentially significant at the programmatic level.

## Mitigation Measures

Construction of projects under the HEU6 are not anticipated to result in significant criteria air pollutant emissions. During operation, cumulative development may exceed the MBARD threshold for VOC, $NO_x$, and CO emissions. Feasible mitigation is not available to reduce operational emissions to below a level of significance. During operation, potentially significant impacts related to VOC, $NO_x$, and CO emissions from the increase in area sources are primarily due to consumer products, but also including landscape equipment, hearths, and mobile emissions. The VOC content of consumer products and architectural coatings, and landscape emissions standards, are beyond the control of the County. It is also beyond the scope of the project for mitigation to control consumers' choices in available products.

Emissions could also be reduced through limiting future natural gas use in buildings, including all-electric development or a ban on new natural gas hearths. However, requirements that limit natural gas use in residential development would conflict with Assembly Bill (AB) 130, which limits the ability of local agencies to enact more restrictive standards for residential development. AB 130 and Senate Bill (SB) 131, signed into effect in June 2025, are intended to streamline CEQA review of new housing development. The bills expanded CEQA exemptions for qualifying housing projects, specifically new infill development. AB 130 also included limitations of local jurisdictions' ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. As such, this limitation would be in place for the entirety of the HEU6 planning cycle, and mitigation measures to control emissions from these sources are not feasible. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP is not yet adopted, and the details of potential future restrictions are unknown. If adopted, applicable natural gas regulations for CCCAAP consistency would reduce criteria air pollutant emissions as a co-benefit of GHG emissions reductions.

The MBARD has updated VOC content limits for architectural coating over time to be increasingly more stringent. Similarly, California Air Resources Board (CARB) establishes and periodically updates VOC limits for various consumer products. CARB also regulates small off-road engines, such as landscaping equipment, and vehicle emissions and standards are anticipated to become more stringent over time, and as older vehicles are retired. Emissions standards have increased over time, and CARB is currently considering more stringent emissions standards and incentives to increase zero emissions equipment use (CARB 2026b). MBARD also has an ongoing incentive programs to replace fuel powered landscape equipment with battery-operated equipment (MBARD 2025). As such, MBARD and CARB efforts would likely reduce project VOC, $NO_x$, and CO emissions over time. Additionally, despite AB 130 limitations at the local level, all-electric development remains a statewide goal. Incentive programs are currently available, such as the California Electric Homes Program, that provide incentives for new all-electric home construction (CEC 2025). The state is also challenging federal actions that result in higher future mobile emissions, as described above. As such, mobile and area emissions calculated in Table 8 and Table 9. However, because these changes to emissions standards and program participation are beyond the control of the County, and because the project is a policy plan and specifics of future development are unknown at this phase of the plan, it cannot be demonstrated that VOC, $NO_x$, or CO emissions would be reduced to a less than significant level. Future development with 25 or more units associated with the project would require compliance with Sections 20.64.250 and 21.64.250 of the Monterey County Code (County Code), which establish requirements to reduce vehicle trips by ensuring that new developments, redevelopment, and expansion of existing developments contain infrastructure and programs to reduce vehicle travel and encourage alternative modes of travel. Compliance with the County Code would result in reductions in vehicle emissions, but the extent of reductions cannot be calculated at this time. This operational impact would remain significant and unavoidable.

## Summary

The project would not result in a potentially significant impact related to maximum daily criteria air pollutant emissions during construction. Buildout operation of the HEU would exceed the MBARD significance thresholds for VOC, $NO_x$, and CO. Future development under the project would continue to be required to comply with the

CARB motor vehicle standards, MBARD rules and regulations, and the General Plan goals and policies. However, impacts from operation of the project would be significant and unavoidable.

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# Attachment 1. CalEEMod Results

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# Monterey HEU - Max Capacity Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Monterey HEU - Max Capacity |
| Construction Start Date | 1/2/2023 |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.80000 |
| Precipitation (days) | 27.6000 |
| Location | Monterey County, CA, USA |
| County | Monterey |
| City | Monterey |
| Air District | Monterey Bay ARD |
| Air Basin | North Central Coast |
| TAZ | 3238 |
| EDFZ | 6 |
| Electric Utility | Central Coast Community Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.43 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 6,000.00 | Dwelling Unit | 375.000 | 6,360,000 | 0.00000 | 0.00000 | 19,920.0 | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 6,000.00 | Dwelling Unit | 375.000 | 6,360,000 | 0.00000 | 0.00000 | 19,920.0 | — |
| Condo/Townhouse | 497.000 | Dwelling Unit | 31.0625 | 526,820 | 0.00000 | 0.00000 | 1,650.00 | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Energy | E-15 | Require All-Electric Development |

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 449.944 | 139.361 | 533.324 | 0.35702 | 3.22971 | 84.6791 | 86.7225 | 3.01031 | 21.9160 | 24.9263 | — | 115,965 | 115,965 | 5.92229 | 7.71288 | 381.211 | 118,717 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 448.921 | 151.598 | 508.779 | 0.35702 | 3.22971 | 84.6791 | 86.7225 | 3.01031 | 21.9160 | 24.9263 | — | 111,763 | 111,763 | 6.59658 | 7.95132 | 9.86793 | 114,250 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 318.884 | 103.679 | 347.396 | 0.25418 | 2.28661 | 59.4776 | 60.8568 | 2.13152 | 15.2398 | 17.3713 | — | 78,545.8 | 78,545.8 | 4.44550 | 5.53161 | 117.184 | 80,351.6 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 58.1963 | 18.9214 | 63.3997 | 0.04639 | 0.41731 | 10.8547 | 11.1064 | 0.38900 | 2.78126 | 3.17027 | — | 13,004.2 | 13,004.2 | 0.73600 | 0.91582 | 19.4011 | 13,303.1 |

### 2.2. Construction Emissions by Year

## 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 54.2650 | 117.608 | 533.324 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 100,716 | 100,716 | 5.54497 | 6.68886 | 381.211 | 103,229 |
| 2024 | 50.0835 | 108.744 | 495.737 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 99,064.2 | 99,064.2 | 5.28738 | 6.68887 | 359.685 | 101,549 |
| 2025 | 47.5663 | 100.901 | 460.546 | 0.23351 | 1.70452 | 67.0613 | 68.7658 | 1.59657 | 16.0021 | 17.5986 | — | 97,307.3 | 97,307.3 | 5.08867 | 6.51127 | 337.650 | 99,712.6 |
| 2026 | 49.7455 | 139.361 | 472.192 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 111,202 | 111,202 | 5.83079 | 7.71288 | 326.058 | 113,972 |
| 2027 | 45.6569 | 132.101 | 444.671 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 109,290 | 109,290 | 5.42452 | 7.29209 | 298.123 | 111,897 |
| 2028 | 449.944 | 110.393 | 469.115 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 115,965 | 115,965 | 5.92229 | 7.68306 | 314.525 | 118,717 |
| 2029 | 447.904 | 103.739 | 442.216 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 113,778 | 113,778 | 3.62894 | 7.50544 | 285.877 | 116,391 |
| 2030 | 445.550 | 98.2855 | 418.532 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 111,618 | 111,618 | 3.16634 | 7.46144 | 258.516 | 114,179 |
| 2031 | 440.754 | 64.4766 | 364.504 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 96,688.1 | 96,688.1 | 2.60094 | 6.23060 | 223.794 | 98,833.7 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 51.6694 | 129.487 | 508.779 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 96,814.0 | 96,814.0 | 6.11161 | 6.88756 | 9.86793 | 99,029.1 |
| 2024 | 49.0228 | 120.247 | 473.231 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 95,253.8 | 95,253.8 | 6.11163 | 6.68887 | 9.32469 | 97,409.2 |
| 2025 | 50.3829 | 151.598 | 473.040 | 0.34063 | 3.07147 | 72.6384 | 75.7099 | 2.86472 | 17.9721 | 20.8369 | — | 107,455 | 107,455 | 6.59658 | 7.69915 | 9.17441 | 109,924 |
| 2026 | 48.8516 | 149.130 | 452.984 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 107,555 | 107,555 | 6.39892 | 7.71508 | 8.44658 | 110,022 |
| 2027 | 44.7630 | 141.659 | 426.414 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 105,718 | 105,718 | 6.01990 | 7.49129 | 7.74924 | 108,109 |
| 2028 | 448.921 | 121.220 | 451.173 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 111,763 | 111,763 | 4.37717 | 7.95132 | 8.13879 | 114,250 |
| 2029 | 446.613 | 114.404 | 423.638 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 109,660 | 109,660 | 4.10657 | 7.77370 | 7.41466 | 112,087 |
| 2030 | 445.243 | 108.713 | 401.343 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 107,580 | 107,580 | 3.88278 | 7.70026 | 6.70448 | 109,978 |
| 2031 | 439.980 | 74.7193 | 346.948 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 92,723.5 | 92,723.5 | 3.07768 | 6.46898 | 5.79734 | 94,734.0 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 37.6218 | 89.8471 | 347.396 | 0.16632 | 1.50170 | 46.9365 | 48.4381 | 1.40180 | 11.1904 | 12.5922 | — | 69,165.8 | 69,165.8 | 4.23292 | 4.76467 | 117.184 | 70,808.7 |
| 2024 | 34.8336 | 83.5950 | 323.762 | 0.16724 | 1.37047 | 47.1943 | 48.5648 | 1.28118 | 11.2519 | 12.5331 | — | 68,424.2 | 68,424.2 | 4.09277 | 4.79085 | 111.093 | 70,065.3 |
| 2025 | 33.1914 | 78.7959 | 302.576 | 0.17329 | 1.30044 | 47.4021 | 48.7025 | 1.21734 | 11.3403 | 12.5576 | — | 67,881.3 | 67,881.3 | 3.96183 | 4.72297 | 104.848 | 69,492.6 |
| 2026 | 34.4682 | 103.679 | 311.239 | 0.25418 | 2.28661 | 56.1262 | 58.4128 | 2.13152 | 15.2398 | 17.3713 | — | 76,918.2 | 76,918.2 | 4.44550 | 5.50839 | 100.546 | 78,771.4 |
| 2027 | 31.6661 | 97.0858 | 291.903 | 0.25205 | 2.09931 | 56.0451 | 58.1444 | 1.95920 | 15.1998 | 17.1590 | — | 75,371.1 | 75,371.1 | 4.14573 | 5.34800 | 92.0077 | 77,160.5 |
| 2028 | 199.608 | 80.1957 | 288.005 | 0.22726 | 1.38300 | 56.0931 | 57.4761 | 1.30027 | 13.8108 | 15.1111 | — | 76,289.7 | 76,289.7 | 2.66608 | 5.53082 | 91.8233 | 78,096.3 |
| 2029 | 318.884 | 78.9440 | 291.468 | 0.23127 | 1.37917 | 59.4776 | 60.8568 | 1.26525 | 14.6013 | 15.8666 | — | 78,545.8 | 78,545.8 | 2.76268 | 5.53161 | 88.2607 | 80,351.6 |
| 2030 | 316.866 | 67.7569 | 267.502 | 0.20549 | 1.08624 | 58.1417 | 59.2280 | 1.00381 | 14.1288 | 15.1326 | — | 73,923.0 | 73,923.0 | 2.29605 | 5.07608 | 78.8356 | 75,571.9 |
| 2031 | 252.576 | 49.0219 | 229.288 | 0.15240 | 0.55101 | 53.7164 | 54.2674 | 0.40037 | 12.7783 | 13.1787 | — | 64,513.2 | 64,513.2 | 1.96980 | 4.37325 | 66.9283 | 65,932.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.86598 | 16.3971 | 63.3997 | 0.03035 | 0.27406 | 8.56590 | 8.83996 | 0.25583 | 2.04225 | 2.29808 | — | 11,451.2 | 11,451.2 | 0.70081 | 0.78885 | 19.4011 | 11,723.2 |
| 2024 | 6.35713 | 15.2561 | 59.0865 | 0.03052 | 0.25011 | 8.61297 | 8.86308 | 0.23382 | 2.05348 | 2.28729 | — | 11,328.4 | 11,328.4 | 0.67761 | 0.79318 | 18.3927 | 11,600.1 |
| 2025 | 6.05743 | 14.3803 | 55.2201 | 0.03163 | 0.23733 | 8.65088 | 8.88821 | 0.22216 | 2.06960 | 2.29176 | — | 11,238.5 | 11,238.5 | 0.65593 | 0.78194 | 17.3588 | 11,505.3 |
| 2026 | 6.29044 | 18.9214 | 56.8012 | 0.04639 | 0.41731 | 10.2430 | 10.6603 | 0.38900 | 2.78126 | 3.17027 | — | 12,734.7 | 12,734.7 | 0.73600 | 0.91198 | 16.6465 | 13,041.5 |
| 2027 | 5.77906 | 17.7182 | 53.2723 | 0.04600 | 0.38312 | 10.2282 | 10.6113 | 0.35755 | 2.77397 | 3.13152 | — | 12,478.5 | 12,478.5 | 0.68637 | 0.88542 | 15.2329 | 12,774.8 |
| 2028 | 36.4285 | 14.6357 | 52.5609 | 0.04147 | 0.25240 | 10.2370 | 10.4894 | 0.23730 | 2.52047 | 2.75777 | — | 12,630.6 | 12,630.6 | 0.44140 | 0.91569 | 15.2024 | 12,929.7 |
| 2029 | 58.1963 | 14.4073 | 53.1929 | 0.04221 | 0.25170 | 10.8547 | 11.1064 | 0.23091 | 2.66474 | 2.89565 | — | 13,004.2 | 13,004.2 | 0.45739 | 0.91582 | 14.6126 | 13,303.1 |
| 2030 | 57.8280 | 12.3656 | 48.8191 | 0.03750 | 0.19824 | 10.6109 | 10.8091 | 0.18319 | 2.57850 | 2.76169 | — | 12,238.8 | 12,238.8 | 0.38014 | 0.84040 | 13.0521 | 12,511.8 |
| 2031 | 46.0952 | 8.94649 | 41.8451 | 0.02781 | 0.10056 | 9.80325 | 9.90381 | 0.07307 | 2.33204 | 2.40511 | — | 10,680.9 | 10,680.9 | 0.32612 | 0.72404 | 11.0807 | 10,915.9 |

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 3.52486 | 32.6394 | 32.9632 | 0.05591 | 1.34932 | 0.00000 | 1.34932 | 1.24138 | 0.00000 | 1.24138 | — | 5,822.67 | 5,822.67 | 0.23619 | 0.04724 | 0.00000 | 5,842.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 6.72163 | 62.3177 | 61.2732 | 0.11684 | 2.58430 | 3.63748 | 6.22178 | 2.37755 | 1.43225 | 3.80980 | — | 12,421.5 | 12,421.5 | 0.50387 | 0.10077 | 0.00000 | 12,464.2 |
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 2.73507 | 25.8641 | 24.9658 | 0.04004 | 1.11606 | 0.00000 | 1.11606 | 1.02678 | 0.00000 | 1.02678 | — | 4,170.59 | 4,170.59 | 0.16918 | 0.03384 | 0.00000 | 4,184.90 |
| 2025 | 2.71169 | 25.1143 | 25.2626 | 0.04363 | 1.03872 | 0.22067 | 1.25939 | 0.95562 | 0.08689 | 1.04251 | — | 4,559.37 | 4,559.37 | 0.18495 | 0.03699 | 0.00000 | 4,575.02 |
| 2026 | 5.14130 | 46.8832 | 49.0335 | 0.09433 | 1.93864 | 7.68402 | 9.62265 | 1.78354 | 3.63682 | 5.42036 | — | 10,114.6 | 10,114.6 | 0.41029 | 0.08206 | 0.00000 | 10,149.3 |
| 2027 | 4.83418 | 43.2627 | 47.2122 | 0.09220 | 1.75133 | 7.60901 | 9.36033 | 1.61122 | 3.59827 | 5.20949 | — | 9,887.87 | 9,887.87 | 0.40110 | 0.08022 | 0.00000 | 9,921.81 |
| 2028 | 170.798 | 26.9318 | 33.3427 | 0.06697 | 1.03406 | 2.60532 | 3.63938 | 0.95134 | 1.02584 | 1.97717 | — | 7,131.83 | 7,131.83 | 0.28930 | 0.05786 | 0.00000 | 7,156.31 |
| 2029 | 289.259 | 27.5464 | 36.2855 | 0.07142 | 1.03119 | 2.59820 | 3.62939 | 0.94869 | 1.02303 | 1.97173 | — | 7,597.93 | 7,597.93 | 0.30821 | 0.06164 | 0.00000 | 7,624.00 |
| 2030 | 288.510 | 21.3003 | 29.7782 | 0.05676 | 0.77003 | 1.72264 | 2.49267 | 0.70843 | 0.67828 | 1.38671 | — | 6,010.16 | 6,010.16 | 0.24380 | 0.04876 | 0.00000 | 6,030.78 |
| 2031 | 226.746 | 9.68912 | 15.3674 | 0.02555 | 0.29730 | 0.00000 | 0.29730 | 0.27351 | 0.00000 | 0.27351 | — | 2,638.66 | 2,638.66 | 0.10704 | 0.02141 | 0.00000 | 2,647.72 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.49915 | 4.72019 | 4.55625 | 0.00731 | 0.20368 | 0.00000 | 0.20368 | 0.18739 | 0.00000 | 0.18739 | — | 690.488 | 690.488 | 0.02801 | 0.00560 | 0.00000 | 692.858 |
| 2025 | 0.49488 | 4.58336 | 4.61042 | 0.00796 | 0.18957 | 0.04027 | 0.22984 | 0.17440 | 0.01586 | 0.19026 | — | 754.856 | 754.856 | 0.03062 | 0.00612 | 0.00000 | 757.447 |
| 2026 | 0.93829 | 8.55618 | 8.94862 | 0.01722 | 0.35380 | 1.40233 | 1.75613 | 0.32550 | 0.66372 | 0.98922 | — | 1,674.59 | 1,674.59 | 0.06793 | 0.01359 | 0.00000 | 1,680.34 |
| 2027 | 0.88224 | 7.89543 | 8.61624 | 0.01683 | 0.31962 | 1.38864 | 1.70826 | 0.29405 | 0.65668 | 0.95073 | — | 1,637.05 | 1,637.05 | 0.06641 | 0.01328 | 0.00000 | 1,642.67 |
| 2028 | 31.1706 | 4.91506 | 6.08505 | 0.01222 | 0.18872 | 0.47547 | 0.66419 | 0.17362 | 0.18721 | 0.36083 | — | 1,180.76 | 1,180.76 | 0.04790 | 0.00958 | 0.00000 | 1,184.81 |
| 2029 | 52.7897 | 5.02722 | 6.62211 | 0.01303 | 0.18819 | 0.47417 | 0.66236 | 0.17314 | 0.18670 | 0.35984 | — | 1,257.92 | 1,257.92 | 0.05103 | 0.01021 | 0.00000 | 1,262.24 |
| 2030 | 52.6532 | 3.88731 | 5.43453 | 0.01036 | 0.14053 | 0.31438 | 0.45491 | 0.12929 | 0.12379 | 0.25307 | — | 995.050 | 995.050 | 0.04036 | 0.00807 | 0.00000 | 998.465 |
| 2031 | 41.3811 | 1.76826 | 2.80456 | 0.00466 | 0.05426 | 0.00000 | 0.05426 | 0.04992 | 0.00000 | 0.04992 | — | 436.861 | 436.861 | 0.01772 | 0.00354 | 0.00000 | 438.360 |

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 50.1630 | 78.4514 | 496.664 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 94,893.4 | 94,893.4 | 5.30878 | 6.64163 | 381.211 | 97,386.6 |
| 2024 | 46.2649 | 72.6334 | 460.880 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 93,241.3 | 93,241.3 | 5.05118 | 6.64163 | 359.685 | 95,706.5 |
| 2025 | 44.0414 | 68.2618 | 427.583 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 91,484.7 | 91,484.7 | 4.85248 | 6.46403 | 337.650 | 93,869.9 |
| 2026 | 42.4866 | 73.1182 | 402.847 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 96,908.0 | 96,908.0 | 5.25097 | 7.59692 | 326.058 | 99,629.2 |
| 2027 | 38.6299 | 69.1580 | 376.172 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 94,997.0 | 94,997.0 | 4.84473 | 7.17614 | 298.123 | 97,554.7 |
| 2028 | 44.8523 | 69.7032 | 417.983 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 105,325 | 105,325 | 5.49067 | 7.59673 | 314.525 | 108,040 |
| 2029 | 42.9418 | 65.1742 | 391.417 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 103,141 | 103,141 | 3.19746 | 7.41914 | 285.877 | 105,718 |
| 2030 | 40.7190 | 61.1645 | 367.795 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 100,981 | 100,981 | 2.73485 | 7.37515 | 258.516 | 103,506 |
| 2031 | 38.6831 | 49.4558 | 340.672 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 92,647.2 | 92,647.2 | 2.43702 | 6.19782 | 223.794 | 94,778.8 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 47.5674 | 90.3301 | 472.119 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 90,991.4 | 90,991.4 | 5.87543 | 6.84033 | 9.86793 | 93,186.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 45.2042 | 84.1358 | 438.375 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 89,430.9 | 89,430.9 | 5.87543 | 6.64163 | 9.32469 | 91,566.3 |
| 2025 | 43.6613 | 89.2799 | 411.766 | 0.22379 | 0.48717 | 69.0009 | 69.4881 | 0.48717 | 16.5399 | 17.0271 | — | 95,033.7 | 95,033.7 | 6.09271 | 7.59838 | 9.17441 | 97,459.5 |
| 2026 | 41.5927 | 82.8875 | 383.639 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 93,261.1 | 93,261.1 | 5.81911 | 7.59912 | 8.44658 | 95,679.6 |
| 2027 | 37.7360 | 78.7157 | 357.915 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 91,425.3 | 91,425.3 | 5.44012 | 7.37533 | 7.74924 | 93,766.9 |
| 2028 | 43.8293 | 80.5302 | 400.040 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 101,123 | 101,123 | 3.94555 | 7.86500 | 8.13879 | 103,573 |
| 2029 | 41.6506 | 75.8386 | 372.839 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 99,023.0 | 99,023.0 | 3.67508 | 7.68740 | 7.41466 | 101,413 |
| 2030 | 40.4125 | 71.5923 | 350.606 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 96,942.6 | 96,942.6 | 3.45130 | 7.61396 | 6.70448 | 99,304.6 |
| 2031 | 37.9090 | 59.6984 | 323.116 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 88,682.5 | 88,682.5 | 2.91376 | 6.43619 | 5.79734 | 90,679.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 34.6998 | 61.9544 | 321.282 | 0.12651 | 0.25301 | 46.9365 | 47.1895 | 0.25301 | 11.1904 | 11.4434 | — | 65,018.3 | 65,018.3 | 4.06468 | 4.73102 | 117.184 | 66,646.9 |
| 2024 | 32.0985 | 57.7310 | 298.796 | 0.12720 | 0.25440 | 47.1943 | 47.4487 | 0.25440 | 11.2519 | 11.5063 | — | 64,253.6 | 64,253.6 | 3.92360 | 4.75702 | 111.093 | 65,880.4 |
| 2025 | 30.4797 | 53.6816 | 277.313 | 0.12966 | 0.26172 | 47.1814 | 47.4431 | 0.26172 | 11.2534 | 11.5151 | — | 63,321.9 | 63,321.9 | 3.77688 | 4.68598 | 104.848 | 64,917.6 |
| 2026 | 29.3269 | 56.7956 | 262.206 | 0.15985 | 0.34798 | 48.4422 | 48.7902 | 0.34798 | 11.6030 | 11.9510 | — | 66,803.6 | 66,803.6 | 4.03520 | 5.42633 | 100.546 | 68,622.1 |
| 2027 | 26.8319 | 53.8231 | 244.691 | 0.15985 | 0.34798 | 48.4361 | 48.7840 | 0.34798 | 11.6016 | 11.9495 | — | 65,483.2 | 65,483.2 | 3.74463 | 5.26778 | 92.0077 | 67,238.6 |
| 2028 | 28.8099 | 53.2638 | 254.662 | 0.16029 | 0.34893 | 53.4878 | 53.8367 | 0.34893 | 12.7850 | 13.1339 | — | 69,157.8 | 69,157.8 | 2.37678 | 5.47296 | 91.8233 | 70,940.0 |
| 2029 | 29.6250 | 51.3976 | 255.182 | 0.15985 | 0.34798 | 56.8794 | 57.2274 | 0.31656 | 13.5783 | 13.8948 | — | 70,947.9 | 70,947.9 | 2.45448 | 5.46997 | 88.2607 | 72,727.6 |
| 2030 | 28.3554 | 46.4566 | 237.724 | 0.14873 | 0.31621 | 56.4191 | 56.7353 | 0.29538 | 13.4505 | 13.7459 | — | 67,912.9 | 67,912.9 | 2.05225 | 5.02732 | 78.8356 | 69,541.2 |
| 2031 | 25.8304 | 39.3328 | 213.921 | 0.12685 | 0.25371 | 53.7164 | 53.9701 | 0.12685 | 12.7783 | 12.9052 | — | 61,874.6 | 61,874.6 | 1.86277 | 4.35184 | 66.9283 | 63,284.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.33272 | 11.3067 | 58.6340 | 0.02309 | 0.04618 | 8.56590 | 8.61208 | 0.04618 | 2.04225 | 2.08843 | — | 10,764.5 | 10,764.5 | 0.67295 | 0.78327 | 19.4011 | 11,034.2 |
| 2024 | 5.85798 | 10.5359 | 54.5302 | 0.02321 | 0.04643 | 8.61297 | 8.65940 | 0.04643 | 2.05348 | 2.09990 | — | 10,637.9 | 10,637.9 | 0.64960 | 0.78758 | 18.3927 | 10,907.2 |
| 2025 | 5.56255 | 9.79690 | 50.6097 | 0.02366 | 0.04776 | 8.61061 | 8.65837 | 0.04776 | 2.05374 | 2.10151 | — | 10,483.7 | 10,483.7 | 0.62531 | 0.77582 | 17.3588 | 10,747.8 |
| 2026 | 5.35216 | 10.3652 | 47.8525 | 0.02917 | 0.06351 | 8.84070 | 8.90421 | 0.06351 | 2.11755 | 2.18105 | — | 11,060.1 | 11,060.1 | 0.66807 | 0.89839 | 16.6465 | 11,361.2 |
| 2027 | 4.89682 | 9.82272 | 44.6561 | 0.02917 | 0.06351 | 8.83958 | 8.90309 | 0.06351 | 2.11728 | 2.18079 | — | 10,841.5 | 10,841.5 | 0.61997 | 0.87214 | 15.2329 | 11,132.1 |
| 2028 | 5.25781 | 9.72065 | 46.4759 | 0.02925 | 0.06368 | 9.76152 | 9.82520 | 0.06368 | 2.33326 | 2.39694 | — | 11,449.9 | 11,449.9 | 0.39350 | 0.90611 | 15.2024 | 11,744.9 |
| 2029 | 5.40657 | 9.38006 | 46.5708 | 0.02917 | 0.06351 | 10.3805 | 10.4440 | 0.05777 | 2.47804 | 2.53581 | — | 11,746.2 | 11,746.2 | 0.40637 | 0.90562 | 14.6126 | 12,040.9 |
| 2030 | 5.17485 | 8.47833 | 43.3846 | 0.02714 | 0.05771 | 10.2965 | 10.3542 | 0.05391 | 2.45471 | 2.50862 | — | 11,243.8 | 11,243.8 | 0.33977 | 0.83233 | 13.0521 | 11,513.3 |
| 2031 | 4.71405 | 7.17823 | 39.0405 | 0.02315 | 0.04630 | 9.80325 | 9.84955 | 0.02315 | 2.33204 | 2.35519 | — | 10,244.0 | 10,244.0 | 0.30840 | 0.72050 | 11.0807 | 10,477.5 |

## 2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 54.2650 | 117.608 | 533.324 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 100,716 | 100,716 | 5.54497 | 6.68886 | 381.211 | 103,229 |
| 2024 | 50.0835 | 108.744 | 495.737 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 99,064.2 | 99,064.2 | 5.28738 | 6.68887 | 359.685 | 101,549 |
| 2025 | 47.5663 | 100.901 | 460.546 | 0.23351 | 1.70452 | 67.0613 | 68.7658 | 1.59657 | 16.0021 | 17.5986 | — | 97,307.3 | 97,307.3 | 5.08867 | 6.51127 | 337.650 | 99,712.6 |
| 2026 | 49.7455 | 139.361 | 472.192 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 111,202 | 111,202 | 5.83079 | 7.71288 | 326.058 | 113,972 |
| 2027 | 45.6569 | 132.101 | 444.671 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 109,290 | 109,290 | 5.42452 | 7.29209 | 298.123 | 111,897 |
| 2028 | 449.944 | 110.393 | 469.115 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 115,965 | 115,965 | 5.92229 | 7.68306 | 314.525 | 118,717 |
| 2029 | 447.904 | 103.739 | 442.216 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 113,778 | 113,778 | 3.62894 | 7.50544 | 285.877 | 116,391 |
| 2030 | 445.550 | 98.2855 | 418.532 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 111,618 | 111,618 | 3.16634 | 7.46144 | 258.516 | 114,179 |
| 2031 | 440.754 | 64.4766 | 364.504 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 96,688.1 | 96,688.1 | 2.60094 | 6.23060 | 223.794 | 98,833.7 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 51.6694 | 129.487 | 508.779 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 96,814.0 | 96,814.0 | 6.11161 | 6.88756 | 9.86793 | 99,029.1 |
| 2024 | 49.0228 | 120.247 | 473.231 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 95,253.8 | 95,253.8 | 6.11163 | 6.68887 | 9.32469 | 97,409.2 |
| 2025 | 50.3829 | 151.598 | 473.040 | 0.34063 | 3.07147 | 72.6384 | 75.7099 | 2.86472 | 17.9721 | 20.8369 | — | 107,455 | 107,455 | 6.59658 | 7.69915 | 9.17441 | 109,924 |
| 2026 | 48.8516 | 149.130 | 452.984 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 107,555 | 107,555 | 6.39892 | 7.71508 | 8.44658 | 110,022 |
| 2027 | 44.7630 | 141.659 | 426.414 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 105,718 | 105,718 | 6.01990 | 7.49129 | 7.74924 | 108,109 |
| 2028 | 448.921 | 121.220 | 451.173 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 111,763 | 111,763 | 4.37717 | 7.95132 | 8.13879 | 114,250 |
| 2029 | 446.613 | 114.404 | 423.638 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 109,660 | 109,660 | 4.10657 | 7.77370 | 7.41466 | 112,087 |
| 2030 | 445.243 | 108.713 | 401.343 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 107,580 | 107,580 | 3.88278 | 7.70026 | 6.70448 | 109,978 |
| 2031 | 439.980 | 74.7193 | 346.948 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 92,723.5 | 92,723.5 | 3.07768 | 6.46898 | 5.79734 | 94,734.0 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 37.6218 | 89.8471 | 347.396 | 0.16632 | 1.50170 | 46.9365 | 48.4381 | 1.40180 | 11.1904 | 12.5922 | — | 69,165.8 | 69,165.8 | 4.23292 | 4.76467 | 117.184 | 70,808.7 |
| 2024 | 34.8336 | 83.5950 | 323.762 | 0.16724 | 1.37047 | 47.1943 | 48.5648 | 1.28118 | 11.2519 | 12.5331 | — | 68,424.2 | 68,424.2 | 4.09277 | 4.79085 | 111.093 | 70,065.3 |
| 2025 | 33.1914 | 78.7959 | 302.576 | 0.17329 | 1.30044 | 47.4021 | 48.7025 | 1.21734 | 11.3403 | 12.5576 | — | 67,881.3 | 67,881.3 | 3.96183 | 4.72297 | 104.848 | 69,492.6 |
| 2026 | 34.4682 | 103.679 | 311.239 | 0.25418 | 2.28661 | 56.1262 | 58.4128 | 2.13152 | 15.2398 | 17.3713 | — | 76,918.2 | 76,918.2 | 4.44550 | 5.50839 | 100.546 | 78,771.4 |
| 2027 | 31.6661 | 97.0858 | 291.903 | 0.25205 | 2.09931 | 56.0451 | 58.1444 | 1.95920 | 15.1998 | 17.1590 | — | 75,371.1 | 75,371.1 | 4.14573 | 5.34800 | 92.0077 | 77,160.5 |
| 2028 | 199.608 | 80.1957 | 288.005 | 0.22726 | 1.38300 | 56.0931 | 57.4761 | 1.30027 | 13.8108 | 15.1111 | — | 76,289.7 | 76,289.7 | 2.66608 | 5.53082 | 91.8233 | 78,096.3 |
| 2029 | 318.884 | 78.9440 | 291.468 | 0.23127 | 1.37917 | 59.4776 | 60.8568 | 1.26525 | 14.6013 | 15.8666 | — | 78,545.8 | 78,545.8 | 2.76268 | 5.53161 | 88.2607 | 80,351.6 |
| 2030 | 316.866 | 67.7569 | 267.502 | 0.20549 | 1.08624 | 58.1417 | 59.2280 | 1.00381 | 14.1288 | 15.1326 | — | 73,923.0 | 73,923.0 | 2.29605 | 5.07608 | 78.8356 | 75,571.9 |
| 2031 | 252.576 | 49.0219 | 229.288 | 0.15240 | 0.55101 | 53.7164 | 54.2674 | 0.40037 | 12.7783 | 13.1787 | — | 64,513.2 | 64,513.2 | 1.96980 | 4.37325 | 66.9283 | 65,932.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.86598 | 16.3971 | 63.3997 | 0.03035 | 0.27406 | 8.56590 | 8.83996 | 0.25583 | 2.04225 | 2.29808 | — | 11,451.2 | 11,451.2 | 0.70081 | 0.78885 | 19.4011 | 11,723.2 |
| 2024 | 6.35713 | 15.2561 | 59.0865 | 0.03052 | 0.25011 | 8.61297 | 8.86308 | 0.23382 | 2.05348 | 2.28729 | — | 11,328.4 | 11,328.4 | 0.67761 | 0.79318 | 18.3927 | 11,600.1 |
| 2025 | 6.05743 | 14.3803 | 55.2201 | 0.03163 | 0.23733 | 8.65088 | 8.88821 | 0.22216 | 2.06960 | 2.29176 | — | 11,238.5 | 11,238.5 | 0.65593 | 0.78194 | 17.3588 | 11,505.3 |
| 2026 | 6.29044 | 18.9214 | 56.8012 | 0.04639 | 0.41731 | 10.2430 | 10.6603 | 0.38900 | 2.78126 | 3.17027 | — | 12,734.7 | 12,734.7 | 0.73600 | 0.91198 | 16.6465 | 13,041.5 |
| 2027 | 5.77906 | 17.7182 | 53.2723 | 0.04600 | 0.38312 | 10.2282 | 10.6113 | 0.35755 | 2.77397 | 3.13152 | — | 12,478.5 | 12,478.5 | 0.68637 | 0.88542 | 15.2329 | 12,774.8 |
| 2028 | 36.4285 | 14.6357 | 52.5609 | 0.04147 | 0.25240 | 10.2370 | 10.4894 | 0.23730 | 2.52047 | 2.75777 | — | 12,630.6 | 12,630.6 | 0.44140 | 0.91569 | 15.2024 | 12,929.7 |
| 2029 | 58.1963 | 14.4073 | 53.1929 | 0.04221 | 0.25170 | 10.8547 | 11.1064 | 0.23091 | 2.66474 | 2.89565 | — | 13,004.2 | 13,004.2 | 0.45739 | 0.91582 | 14.6126 | 13,303.1 |
| 2030 | 57.8280 | 12.3656 | 48.8191 | 0.03750 | 0.19824 | 10.6109 | 10.8091 | 0.18319 | 2.57850 | 2.76169 | — | 12,238.8 | 12,238.8 | 0.38014 | 0.84040 | 13.0521 | 12,511.8 |
| 2031 | 46.0952 | 8.94649 | 41.8451 | 0.02781 | 0.10056 | 9.80325 | 9.90381 | 0.07307 | 2.33204 | 2.40511 | — | 10,680.9 | 10,680.9 | 0.32612 | 0.72404 | 11.0807 | 10,915.9 |

### 2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 3.52486 | 32.6394 | 32.9632 | 0.05591 | 1.34932 | 0.00000 | 1.34932 | 1.24138 | 0.00000 | 1.24138 | — | 5,822.67 | 5,822.67 | 0.23619 | 0.04724 | 0.00000 | 5,842.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 6.72163 | 62.3177 | 61.2732 | 0.11684 | 2.58430 | 3.63748 | 6.22178 | 2.37755 | 1.43225 | 3.80980 | — | 12,421.5 | 12,421.5 | 0.50387 | 0.10077 | 0.00000 | 12,464.2 |
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 2.73507 | 25.8641 | 24.9658 | 0.04004 | 1.11606 | 0.00000 | 1.11606 | 1.02678 | 0.00000 | 1.02678 | — | 4,170.59 | 4,170.59 | 0.16918 | 0.03384 | 0.00000 | 4,184.90 |
| 2025 | 2.71169 | 25.1143 | 25.2626 | 0.04363 | 1.03872 | 0.22067 | 1.25939 | 0.95562 | 0.08689 | 1.04251 | — | 4,559.37 | 4,559.37 | 0.18495 | 0.03699 | 0.00000 | 4,575.02 |
| 2026 | 5.14130 | 46.8832 | 49.0335 | 0.09433 | 1.93864 | 7.68402 | 9.62265 | 1.78354 | 3.63682 | 5.42036 | — | 10,114.6 | 10,114.6 | 0.41029 | 0.08206 | 0.00000 | 10,149.3 |
| 2027 | 4.83418 | 43.2627 | 47.2122 | 0.09220 | 1.75133 | 7.60901 | 9.36033 | 1.61122 | 3.59827 | 5.20949 | — | 9,887.87 | 9,887.87 | 0.40110 | 0.08022 | 0.00000 | 9,921.81 |
| 2028 | 170.798 | 26.9318 | 33.3427 | 0.06697 | 1.03406 | 2.60532 | 3.63938 | 0.95134 | 1.02584 | 1.97717 | — | 7,131.83 | 7,131.83 | 0.28930 | 0.05786 | 0.00000 | 7,156.31 |
| 2029 | 289.259 | 27.5464 | 36.2855 | 0.07142 | 1.03119 | 2.59820 | 3.62939 | 0.94869 | 1.02303 | 1.97173 | — | 7,597.93 | 7,597.93 | 0.30821 | 0.06164 | 0.00000 | 7,624.00 |
| 2030 | 288.510 | 21.3003 | 29.7782 | 0.05676 | 0.77003 | 1.72264 | 2.49267 | 0.70843 | 0.67828 | 1.38671 | — | 6,010.16 | 6,010.16 | 0.24380 | 0.04876 | 0.00000 | 6,030.78 |
| 2031 | 226.746 | 9.68912 | 15.3674 | 0.02555 | 0.29730 | 0.00000 | 0.29730 | 0.27351 | 0.00000 | 0.27351 | — | 2,638.66 | 2,638.66 | 0.10704 | 0.02141 | 0.00000 | 2,647.72 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.49915 | 4.72019 | 4.55625 | 0.00731 | 0.20368 | 0.00000 | 0.20368 | 0.18739 | 0.00000 | 0.18739 | — | 690.488 | 690.488 | 0.02801 | 0.00560 | 0.00000 | 692.858 |
| 2025 | 0.49488 | 4.58336 | 4.61042 | 0.00796 | 0.18957 | 0.04027 | 0.22984 | 0.17440 | 0.01586 | 0.19026 | — | 754.856 | 754.856 | 0.03062 | 0.00612 | 0.00000 | 757.447 |
| 2026 | 0.93829 | 8.55618 | 8.94862 | 0.01722 | 0.35380 | 1.40233 | 1.75613 | 0.32550 | 0.66372 | 0.98922 | — | 1,674.59 | 1,674.59 | 0.06793 | 0.01359 | 0.00000 | 1,680.34 |
| 2027 | 0.88224 | 7.89543 | 8.61624 | 0.01683 | 0.31962 | 1.38864 | 1.70826 | 0.29405 | 0.65668 | 0.95073 | — | 1,637.05 | 1,637.05 | 0.06641 | 0.01328 | 0.00000 | 1,642.67 |
| 2028 | 31.1706 | 4.91506 | 6.08505 | 0.01222 | 0.18872 | 0.47547 | 0.66419 | 0.17362 | 0.18721 | 0.36083 | — | 1,180.76 | 1,180.76 | 0.04790 | 0.00958 | 0.00000 | 1,184.81 |
| 2029 | 52.7897 | 5.02722 | 6.62211 | 0.01303 | 0.18819 | 0.47417 | 0.66236 | 0.17314 | 0.18670 | 0.35984 | — | 1,257.92 | 1,257.92 | 0.05103 | 0.01021 | 0.00000 | 1,262.24 |
| 2030 | 52.6532 | 3.88731 | 5.43453 | 0.01036 | 0.14053 | 0.31438 | 0.45491 | 0.12929 | 0.12379 | 0.25307 | — | 995.050 | 995.050 | 0.04036 | 0.00807 | 0.00000 | 998.465 |
| 2031 | 41.3811 | 1.76826 | 2.80456 | 0.00466 | 0.05426 | 0.00000 | 0.05426 | 0.04992 | 0.00000 | 0.04992 | — | 436.861 | 436.861 | 0.01772 | 0.00354 | 0.00000 | 438.360 |

### 2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 50.1630 | 78.4514 | 496.664 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 94,893.4 | 94,893.4 | 5.30878 | 6.64163 | 381.211 | 97,386.6 |
| 2024 | 46.2649 | 72.6334 | 460.880 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 93,241.3 | 93,241.3 | 5.05118 | 6.64163 | 359.685 | 95,706.5 |
| 2025 | 44.0414 | 68.2618 | 427.583 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 91,484.7 | 91,484.7 | 4.85248 | 6.46403 | 337.650 | 93,869.9 |
| 2026 | 42.4866 | 73.1182 | 402.847 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 96,908.0 | 96,908.0 | 5.25097 | 7.59692 | 326.058 | 99,629.2 |
| 2027 | 38.6299 | 69.1580 | 376.172 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 94,997.0 | 94,997.0 | 4.84473 | 7.17614 | 298.123 | 97,554.7 |
| 2028 | 44.8523 | 69.7032 | 417.983 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 105,325 | 105,325 | 5.49067 | 7.59673 | 314.525 | 108,040 |
| 2029 | 42.9418 | 65.1742 | 391.417 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 103,141 | 103,141 | 3.19746 | 7.41914 | 285.877 | 105,718 |
| 2030 | 40.7190 | 61.1645 | 367.795 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 100,981 | 100,981 | 2.73485 | 7.37515 | 258.516 | 103,506 |
| 2031 | 38.6831 | 49.4558 | 340.672 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 92,647.2 | 92,647.2 | 2.43702 | 6.19782 | 223.794 | 94,778.8 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 47.5674 | 90.3301 | 472.119 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 90,991.4 | 90,991.4 | 5.87543 | 6.84033 | 9.86793 | 93,186.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 45.2042 | 84.1358 | 438.375 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 89,430.9 | 89,430.9 | 5.87543 | 6.64163 | 9.32469 | 91,566.3 |
| 2025 | 43.6613 | 89.2799 | 411.766 | 0.22379 | 0.48717 | 69.0009 | 69.4881 | 0.48717 | 16.5399 | 17.0271 | — | 95,033.7 | 95,033.7 | 6.09271 | 7.59838 | 9.17441 | 97,459.5 |
| 2026 | 41.5927 | 82.8875 | 383.639 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 93,261.1 | 93,261.1 | 5.81911 | 7.59912 | 8.44658 | 95,679.6 |
| 2027 | 37.7360 | 78.7157 | 357.915 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 91,425.3 | 91,425.3 | 5.44012 | 7.37533 | 7.74924 | 93,766.9 |
| 2028 | 43.8293 | 80.5302 | 400.040 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 101,123 | 101,123 | 3.94555 | 7.86500 | 8.13879 | 103,573 |
| 2029 | 41.6506 | 75.8386 | 372.839 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 99,023.0 | 99,023.0 | 3.67508 | 7.68740 | 7.41466 | 101,413 |
| 2030 | 40.4125 | 71.5923 | 350.606 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 96,942.6 | 96,942.6 | 3.45130 | 7.61396 | 6.70448 | 99,304.6 |
| 2031 | 37.9090 | 59.6984 | 323.116 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 88,682.5 | 88,682.5 | 2.91376 | 6.43619 | 5.79734 | 90,679.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 34.6998 | 61.9544 | 321.282 | 0.12651 | 0.25301 | 46.9365 | 47.1895 | 0.25301 | 11.1904 | 11.4434 | — | 65,018.3 | 65,018.3 | 4.06468 | 4.73102 | 117.184 | 66,646.9 |
| 2024 | 32.0985 | 57.7310 | 298.796 | 0.12720 | 0.25440 | 47.1943 | 47.4487 | 0.25440 | 11.2519 | 11.5063 | — | 64,253.6 | 64,253.6 | 3.92360 | 4.75702 | 111.093 | 65,880.4 |
| 2025 | 30.4797 | 53.6816 | 277.313 | 0.12966 | 0.26172 | 47.1814 | 47.4431 | 0.26172 | 11.2534 | 11.5151 | — | 63,321.9 | 63,321.9 | 3.77688 | 4.68598 | 104.848 | 64,917.6 |
| 2026 | 29.3269 | 56.7956 | 262.206 | 0.15985 | 0.34798 | 48.4422 | 48.7902 | 0.34798 | 11.6030 | 11.9510 | — | 66,803.6 | 66,803.6 | 4.03520 | 5.42633 | 100.546 | 68,622.1 |
| 2027 | 26.8319 | 53.8231 | 244.691 | 0.15985 | 0.34798 | 48.4361 | 48.7840 | 0.34798 | 11.6016 | 11.9495 | — | 65,483.2 | 65,483.2 | 3.74463 | 5.26778 | 92.0077 | 67,238.6 |
| 2028 | 28.8099 | 53.2638 | 254.662 | 0.16029 | 0.34893 | 53.4878 | 53.8367 | 0.34893 | 12.7850 | 13.1339 | — | 69,157.8 | 69,157.8 | 2.37678 | 5.47296 | 91.8233 | 70,940.0 |
| 2029 | 29.6250 | 51.3976 | 255.182 | 0.15985 | 0.34798 | 56.8794 | 57.2274 | 0.31656 | 13.5783 | 13.8948 | — | 70,947.9 | 70,947.9 | 2.45448 | 5.46997 | 88.2607 | 72,727.6 |
| 2030 | 28.3554 | 46.4566 | 237.724 | 0.14873 | 0.31621 | 56.4191 | 56.7353 | 0.29538 | 13.4505 | 13.7459 | — | 67,912.9 | 67,912.9 | 2.05225 | 5.02732 | 78.8356 | 69,541.2 |
| 2031 | 25.8304 | 39.3328 | 213.921 | 0.12685 | 0.25371 | 53.7164 | 53.9701 | 0.12685 | 12.7783 | 12.9052 | — | 61,874.6 | 61,874.6 | 1.86277 | 4.35184 | 66.9283 | 63,284.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.33272 | 11.3067 | 58.6340 | 0.02309 | 0.04618 | 8.56590 | 8.61208 | 0.04618 | 2.04225 | 2.08843 | — | 10,764.5 | 10,764.5 | 0.67295 | 0.78327 | 19.4011 | 11,034.2 |
| 2024 | 5.85798 | 10.5359 | 54.5302 | 0.02321 | 0.04643 | 8.61297 | 8.65940 | 0.04643 | 2.05348 | 2.09990 | — | 10,637.9 | 10,637.9 | 0.64960 | 0.78758 | 18.3927 | 10,907.2 |
| 2025 | 5.56255 | 9.79690 | 50.6097 | 0.02366 | 0.04776 | 8.61061 | 8.65837 | 0.04776 | 2.05374 | 2.10151 | — | 10,483.7 | 10,483.7 | 0.62531 | 0.77582 | 17.3588 | 10,747.8 |
| 2026 | 5.35216 | 10.3652 | 47.8525 | 0.02917 | 0.06351 | 8.84070 | 8.90421 | 0.06351 | 2.11755 | 2.18105 | — | 11,060.1 | 11,060.1 | 0.66807 | 0.89839 | 16.6465 | 11,361.2 |
| 2027 | 4.89682 | 9.82272 | 44.6561 | 0.02917 | 0.06351 | 8.83958 | 8.90309 | 0.06351 | 2.11728 | 2.18079 | — | 10,841.5 | 10,841.5 | 0.61997 | 0.87214 | 15.2329 | 11,132.1 |
| 2028 | 5.25781 | 9.72065 | 46.4759 | 0.02925 | 0.06368 | 9.76152 | 9.82520 | 0.06368 | 2.33326 | 2.39694 | — | 11,449.9 | 11,449.9 | 0.39350 | 0.90611 | 15.2024 | 11,744.9 |
| 2029 | 5.40657 | 9.38006 | 46.5708 | 0.02917 | 0.06351 | 10.3805 | 10.4440 | 0.05777 | 2.47804 | 2.53581 | — | 11,746.2 | 11,746.2 | 0.40637 | 0.90562 | 14.6126 | 12,040.9 |
| 2030 | 5.17485 | 8.47833 | 43.3846 | 0.02714 | 0.05771 | 10.2965 | 10.3542 | 0.05391 | 2.45471 | 2.50862 | — | 11,243.8 | 11,243.8 | 0.33977 | 0.83233 | 13.0521 | 11,513.3 |
| 2031 | 4.71405 | 7.17823 | 39.0405 | 0.02315 | 0.04630 | 9.80325 | 9.84955 | 0.02315 | 2.33204 | 2.35519 | — | 10,244.0 | 10,244.0 | 0.30840 | 0.72050 | 11.0807 | 10,477.5 |

## 2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 383.019 | 133.869 | 761.497 | 0.84100 | 10.6197 | 0.00000 | 10.6197 | 10.5328 | 0.00000 | 10.5328 | 5,981.49 | 212,926 | 218,908 | 619.020 | 3.27426 | 94.8738 | 235,454 |
| Mit. | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | 0.00000 | 0.35648 | 0.26963 | 0.00000 | 0.26963 | 5,981.49 | 51,808.9 | 57,790.4 | 604.761 | 2.97097 | 94.8738 | 73,889.6 |
| % Reduced | 2% | 95% | 7% | 96% | 97% | — | 97% | 97% | — | 97% | — | 76% | 74% | 2% | 9% | — | 69% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 319.304 | 126.939 | 54.0167 | 0.81025 | 10.2632 | 0.00000 | 10.2632 | 10.2632 | 0.00000 | 10.2632 | 5,981.49 | 211,030 | 217,012 | 618.940 | 3.25853 | 94.8738 | 233,551 |
| Mit. | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 5,981.49 | 49,913.3 | 55,894.8 | 604.682 | 2.95524 | 94.8738 | 71,987.3 |
| % Reduced | 2% | 100% | 100% | 100% | 100% | — | 100% | 100% | — | 100% | — | 76% | 74% | 2% | 9% | — | 69% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 362.944 | 131.686 | 538.592 | 0.83131 | 10.5073 | 0.00000 | 10.5073 | 10.4479 | 0.00000 | 10.4479 | 5,981.49 | 212,329 | 218,310 | 618.995 | 3.26931 | 94.8738 | 234,854 |
| Mit. | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | 0.00000 | 0.24416 | 0.18468 | 0.00000 | 0.18468 | 5,981.49 | 51,211.7 | 57,193.1 | 604.736 | 2.96602 | 94.8738 | 73,290.3 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 66.2374 | 24.0327 | 98.2931 | 0.15171 | 1.91759 | 0.00000 | 1.91759 | 1.90673 | 0.00000 | 1.90673 | 990.304 | 35,153.5 | 36,143.8 | 102.482 | 0.54127 | 15.7074 | 38,882.8 |
| Mit. | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | 0.00000 | 0.04456 | 0.03370 | 0.00000 | 0.03370 | 990.304 | 8,478.67 | 9,468.98 | 100.121 | 0.49106 | 15.7074 | 12,134.0 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |

## 2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 383.019 | 133.869 | 761.497 | 0.84100 | 10.6197 | 0.00000 | 10.6197 | 10.5328 | 0.00000 | 10.5328 | 5,981.49 | 212,926 | 218,908 | 619.020 | 3.27426 | 94.8738 | 235,454 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 319.304 | 126.939 | 54.0167 | 0.81025 | 10.2632 | 0.00000 | 10.2632 | 10.2632 | 0.00000 | 10.2632 | 5,981.49 | 211,030 | 217,012 | 618.940 | 3.25853 | 94.8738 | 233,551 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | — | 0.24416 | 0.18468 | — | 0.18468 | 0.00000 | 1,298.38 | 1,298.38 | 0.05427 | 0.01077 | — | 1,302.95 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 362.944 | 131.686 | 538.592 | 0.83131 | 10.5073 | 0.00000 | 10.5073 | 10.4479 | 0.00000 | 10.4479 | 5,981.49 | 212,329 | 218,310 | 618.995 | 3.26931 | 94.8738 | 234,854 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Energy | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 34,442.5 | 34,442.5 | 3.02337 | 0.13054 | — | 34,557.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Waste | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | 66.2374 | 24.0327 | 98.2931 | 0.15171 | 1.91759 | 0.00000 | 1.91759 | 1.90673 | 0.00000 | 1.90673 | 990.304 | 35,153.5 | 36,143.8 | 102.482 | 0.54127 | 15.7074 | 38,882.8 |

## 2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | 0.00000 | 0.35648 | 0.26963 | 0.00000 | 0.26963 | 5,981.49 | 51,808.9 | 57,790.4 | 604.761 | 2.97097 | 94.8738 | 73,889.6 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 5,981.49 | 49,913.3 | 55,894.8 | 604.682 | 2.95524 | 94.8738 | 71,987.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | — | 0.24416 | 0.18468 | — | 0.18468 | 0.00000 | 1,298.38 | 1,298.38 | 0.05427 | 0.01077 | — | 1,302.95 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | 0.00000 | 0.24416 | 0.18468 | 0.00000 | 0.18468 | 5,981.49 | 51,211.7 | 57,193.1 | 604.736 | 2.96602 | 94.8738 | 73,290.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |
| Water | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Waste | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | 0.00000 | 0.04456 | 0.03370 | 0.00000 | 0.03370 | 990.304 | 8,478.67 | 9,468.98 | 100.121 | 0.49106 | 15.7074 | 12,134.0 |

# 3. Construction Emissions Details

## 3.1. Demolition (2023)

### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.2. Demolition (2024)

### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.87375 | 17.8279 | 15.5720 | 0.02328 | 0.75954 | — | 0.75954 | 0.69878 | — | 0.69878 | — | 2,453.30 | 2,453.30 | 0.09952 | 0.01990 | — | 2,461.72 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34196 | 3.25359 | 2.84190 | 0.00425 | 0.13862 | — | 0.13862 | 0.12753 | — | 0.12753 | — | 406.172 | 406.172 | 0.01648 | 0.00330 | — | 407.566 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07454 | 0.05361 | 0.73313 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 110.578 | 110.578 | 0.00644 | 0.00445 | 0.48365 | 112.550 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05173 | 0.04631 | 0.47279 | 0.00000 | 0.00000 | 0.07061 | 0.07061 | 0.00000 | 0.01653 | 0.01653 | — | 74.9796 | 74.9796 | 0.00509 | 0.00319 | 0.14947 | 76.2069 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00944 | 0.00845 | 0.08628 | 0.00000 | 0.00000 | 0.01289 | 0.01289 | 0.00000 | 0.00302 | 0.00302 | — | 12.4137 | 12.4137 | 0.00084 | 0.00053 | 0.02475 | 12.6169 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.87375 | 17.8279 | 15.5720 | 0.02328 | 0.75954 | — | 0.75954 | 0.69878 | — | 0.69878 | — | 2,453.30 | 2,453.30 | 0.09952 | 0.01990 | — | 2,461.72 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34196 | 3.25359 | 2.84190 | 0.00425 | 0.13862 | — | 0.13862 | 0.12753 | — | 0.12753 | — | 406.172 | 406.172 | 0.01648 | 0.00330 | — | 407.566 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07454 | 0.05361 | 0.73313 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 110.578 | 110.578 | 0.00644 | 0.00445 | 0.48365 | 112.550 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05173 | 0.04631 | 0.47279 | 0.00000 | 0.00000 | 0.07061 | 0.07061 | 0.00000 | 0.01653 | 0.01653 | — | 74.9796 | 74.9796 | 0.00509 | 0.00319 | 0.14947 | 76.2069 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00944 | 0.00845 | 0.08628 | 0.00000 | 0.00000 | 0.01289 | 0.01289 | 0.00000 | 0.00302 | 0.00302 | — | 12.4137 | 12.4137 | 0.00084 | 0.00053 | 0.02475 | 12.6169 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.3. Demolition (2025)

### 3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.71283 | 15.8537 | 14.2308 | 0.02322 | 0.65534 | — | 0.65534 | 0.60292 | — | 0.60292 | — | 2,446.42 | 2,446.42 | 0.09924 | 0.01985 | — | 2,454.82 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.31259 | 2.89330 | 2.59712 | 0.00424 | 0.11960 | — | 0.11960 | 0.11003 | — | 0.11003 | — | 405.033 | 405.033 | 0.01643 | 0.00329 | — | 406.423 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07123 | 0.04948 | 0.68003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 108.441 | 108.441 | 0.00611 | 0.00445 | 0.44783 | 110.369 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07024 | 0.06499 | 0.64566 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.205 | 102.205 | 0.00743 | 0.00445 | 0.01164 | 103.729 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04923 | 0.04100 | 0.43815 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 73.3433 | 73.3433 | 0.00484 | 0.00318 | 0.13851 | 74.5508 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00898 | 0.00748 | 0.07996 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 12.1428 | 12.1428 | 0.00080 | 0.00053 | 0.02293 | 12.3427 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.71283 | 15.8537 | 14.2308 | 0.02322 | 0.65534 | — | 0.65534 | 0.60292 | — | 0.60292 | — | 2,446.42 | 2,446.42 | 0.09924 | 0.01985 | — | 2,454.82 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.31259 | 2.89330 | 2.59712 | 0.00424 | 0.11960 | — | 0.11960 | 0.11003 | — | 0.11003 | — | 405.033 | 405.033 | 0.01643 | 0.00329 | — | 406.423 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07123 | 0.04948 | 0.68003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 108.441 | 108.441 | 0.00611 | 0.00445 | 0.44783 | 110.369 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07024 | 0.06499 | 0.64566 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.205 | 102.205 | 0.00743 | 0.00445 | 0.01164 | 103.729 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04923 | 0.04100 | 0.43815 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 73.3433 | 73.3433 | 0.00484 | 0.00318 | 0.13851 | 74.5508 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00898 | 0.00748 | 0.07996 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 12.1428 | 12.1428 | 0.00080 | 0.00053 | 0.02293 | 12.3427 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.4. Demolition (2026)

### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28674 | 20.6515 | 19.0056 | 0.03253 | 0.84309 | — | 0.84309 | 0.77564 | — | 0.77564 | — | 3,426.59 | 3,426.59 | 0.13900 | 0.02780 | — | 3,438.35 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11635 | 1.05076 | 0.96702 | 0.00165 | 0.04290 | — | 0.04290 | 0.03947 | — | 0.03947 | — | 174.347 | 174.347 | 0.00707 | 0.00141 | — | 174.946 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02123 | 0.19176 | 0.17648 | 0.00030 | 0.00783 | — | 0.00783 | 0.00720 | — | 0.00720 | — | 28.8652 | 28.8652 | 0.00117 | 0.00023 | — | 28.9642 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06694 | 0.05773 | 0.60112 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.283 | 100.283 | 0.00710 | 0.00445 | 0.01075 | 101.799 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00336 | 0.00273 | 0.02920 | 0.00000 | 0.00000 | 0.00502 | 0.00502 | 0.00000 | 0.00117 | 0.00117 | — | 5.12627 | 5.12627 | 0.00034 | 0.00023 | 0.00911 | 5.21154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00061 | 0.00050 | 0.00533 | 0.00000 | 0.00000 | 0.00092 | 0.00092 | 0.00000 | 0.00021 | 0.00021 | — | 0.84871 | 0.84871 | 0.00006 | 0.00004 | 0.00151 | 0.86283 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28674 | 20.6515 | 19.0056 | 0.03253 | 0.84309 | — | 0.84309 | 0.77564 | — | 0.77564 | — | 3,426.59 | 3,426.59 | 0.13900 | 0.02780 | — | 3,438.35 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11635 | 1.05076 | 0.96702 | 0.00165 | 0.04290 | — | 0.04290 | 0.03947 | — | 0.03947 | — | 174.347 | 174.347 | 0.00707 | 0.00141 | — | 174.946 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02123 | 0.19176 | 0.17648 | 0.00030 | 0.00783 | — | 0.00783 | 0.00720 | — | 0.00720 | — | 28.8652 | 28.8652 | 0.00117 | 0.00023 | — | 28.9642 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06694 | 0.05773 | 0.60112 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.283 | 100.283 | 0.00710 | 0.00445 | 0.01075 | 101.799 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00336 | 0.00273 | 0.02920 | 0.00000 | 0.00000 | 0.00502 | 0.00502 | 0.00000 | 0.00117 | 0.00117 | — | 5.12627 | 5.12627 | 0.00034 | 0.00023 | 0.00911 | 5.21154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00061 | 0.00050 | 0.00533 | 0.00000 | 0.00000 | 0.00092 | 0.00092 | 0.00000 | 0.00021 | 0.00021 | — | 0.84871 | 0.84871 | 0.00006 | 0.00004 | 0.00151 | 0.86283 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.5. Site Preparation (2026)

### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.08566 | 19.3472 | 19.1115 | 0.03244 | 0.82429 | — | 0.82429 | 0.75835 | — | 0.75835 | — | 3,514.68 | 3,514.68 | 0.14257 | 0.02851 | — | 3,526.74 |
| Dust From Material Movement | — | — | — | — | — | 5.08582 | 5.08582 | — | 2.61379 | 2.61379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38063 | 3.53087 | 3.48785 | 0.00592 | 0.15043 | — | 0.15043 | 0.13840 | — | 0.13840 | — | 581.895 | 581.895 | 0.02360 | 0.00472 | — | 583.892 |
| Dust From Material Movement | — | — | — | — | — | 0.92816 | 0.92816 | — | 0.47702 | 0.47702 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07963 | 0.05331 | 0.73949 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 124.116 | 124.116 | 0.00713 | 0.00520 | 0.48433 | 126.327 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07809 | 0.06735 | 0.70130 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 116.997 | 116.997 | 0.00828 | 0.00520 | 0.01254 | 118.765 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05104 | 0.04149 | 0.44425 | 0.00000 | 0.00000 | 0.07630 | 0.07630 | 0.00000 | 0.01786 | 0.01786 | — | 77.9785 | 77.9785 | 0.00524 | 0.00345 | 0.13864 | 79.2755 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00931 | 0.00757 | 0.08107 | 0.00000 | 0.00000 | 0.01393 | 0.01393 | 0.00000 | 0.00326 | 0.00326 | — | 12.9102 | 12.9102 | 0.00087 | 0.00057 | 0.02295 | 13.1250 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.08566 | 19.3472 | 19.1115 | 0.03244 | 0.82429 | — | 0.82429 | 0.75835 | — | 0.75835 | — | 3,514.68 | 3,514.68 | 0.14257 | 0.02851 | — | 3,526.74 |
| Dust From Material Movement | — | — | — | — | — | 5.08582 | 5.08582 | — | 2.61379 | 2.61379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38063 | 3.53087 | 3.48785 | 0.00592 | 0.15043 | — | 0.15043 | 0.13840 | — | 0.13840 | — | 581.895 | 581.895 | 0.02360 | 0.00472 | — | 583.892 |
| Dust From Material Movement | — | — | — | — | — | 0.92816 | 0.92816 | — | 0.47702 | 0.47702 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07963 | 0.05331 | 0.73949 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 124.116 | 124.116 | 0.00713 | 0.00520 | 0.48433 | 126.327 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.07809 | 0.06735 | 0.70130 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 116.997 | 116.997 | 0.00828 | 0.00520 | 0.01254 | 118.765 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05104 | 0.04149 | 0.44425 | 0.00000 | 0.00000 | 0.07630 | 0.07630 | 0.00000 | 0.01786 | 0.01786 | — | 77.9785 | 77.9785 | 0.00524 | 0.00345 | 0.13864 | 79.2755 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00931 | 0.00757 | 0.08107 | 0.00000 | 0.00000 | 0.01393 | 0.01393 | 0.00000 | 0.00326 | 0.00326 | — | 12.9102 | 12.9102 | 0.00087 | 0.00057 | 0.02295 | 13.1250 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.6. Site Preparation (2027)

### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99465 | 18.2833 | 18.4840 | 0.03197 | 0.76587 | — | 0.76587 | 0.70460 | — | 0.70460 | — | 3,462.76 | 3,462.76 | 0.14046 | 0.02809 | — | 3,474.65 |
| Dust From Material Movement | — | — | — | — | — | 5.01081 | 5.01081 | — | 2.57523 | 2.57523 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36402 | 3.33671 | 3.37332 | 0.00583 | 0.13977 | — | 0.13977 | 0.12859 | — | 0.12859 | — | 573.300 | 573.300 | 0.02326 | 0.00465 | — | 575.267 |
| Dust From Material Movement | — | — | — | — | — | 0.91447 | 0.91447 | — | 0.46998 | 0.46998 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07251 | 0.04927 | 0.68966 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.793 | 121.793 | 0.00674 | 0.00481 | 0.44619 | 123.841 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07097 | 0.06293 | 0.65338 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 114.817 | 114.817 | 0.00790 | 0.00520 | 0.01160 | 116.575 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04613 | 0.03799 | 0.40813 | 0.00000 | 0.00000 | 0.07518 | 0.07518 | 0.00000 | 0.01760 | 0.01760 | — | 75.3993 | 75.3993 | 0.00491 | 0.00340 | 0.12601 | 76.6603 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00842 | 0.00693 | 0.07448 | 0.00000 | 0.00000 | 0.01372 | 0.01372 | 0.00000 | 0.00321 | 0.00321 | — | 12.4832 | 12.4832 | 0.00081 | 0.00056 | 0.02086 | 12.6920 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99465 | 18.2833 | 18.4840 | 0.03197 | 0.76587 | — | 0.76587 | 0.70460 | — | 0.70460 | — | 3,462.76 | 3,462.76 | 0.14046 | 0.02809 | — | 3,474.65 |
| Dust From Material Movement | — | — | — | — | — | 5.01081 | 5.01081 | — | 2.57523 | 2.57523 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36402 | 3.33671 | 3.37332 | 0.00583 | 0.13977 | — | 0.13977 | 0.12859 | — | 0.12859 | — | 573.300 | 573.300 | 0.02326 | 0.00465 | — | 575.267 |
| Dust From Material Movement | — | — | — | — | — | 0.91447 | 0.91447 | — | 0.46998 | 0.46998 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07251 | 0.04927 | 0.68966 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.793 | 121.793 | 0.00674 | 0.00481 | 0.44619 | 123.841 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07097 | 0.06293 | 0.65338 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 114.817 | 114.817 | 0.00790 | 0.00520 | 0.01160 | 116.575 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04613 | 0.03799 | 0.40813 | 0.00000 | 0.00000 | 0.07518 | 0.07518 | 0.00000 | 0.01760 | 0.01760 | — | 75.3993 | 75.3993 | 0.00491 | 0.00340 | 0.12601 | 76.6603 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00842 | 0.00693 | 0.07448 | 0.00000 | 0.00000 | 0.01372 | 0.01372 | 0.00000 | 0.00321 | 0.00321 | — | 12.4832 | 12.4832 | 0.00081 | 0.00056 | 0.02086 | 12.6920 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.7. Grading (2025)

### 3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19393 | 1.80044 | 1.71744 | 0.00370 | 0.07492 | — | 0.07492 | 0.06893 | — | 0.06893 | — | 400.322 | 400.322 | 0.01624 | 0.00325 | — | 401.696 |
| Dust From Material Movement | — | — | — | — | — | 0.22067 | 0.22067 | — | 0.08689 | 0.08689 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03539 | 0.32858 | 0.31343 | 0.00067 | 0.01367 | — | 0.01367 | 0.01258 | — | 0.01258 | — | 66.2779 | 66.2779 | 0.00269 | 0.00054 | — | 66.5053 |
| Dust From Material Movement | — | — | — | — | — | 0.04027 | 0.04027 | — | 0.01586 | 0.01586 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.57717 | 3.44242 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 7,136.65 | 7,136.65 | 0.43553 | 1.12841 | 0.37997 | 7,484.19 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00557 | 0.00464 | 0.04962 | 0.00000 | 0.00000 | 0.00797 | 0.00797 | 0.00000 | 0.00187 | 0.00187 | — | 8.30554 | 8.30554 | 0.00055 | 0.00036 | 0.01568 | 8.44229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00947 | 0.57033 | 0.20750 | 0.00280 | 0.00801 | 0.10803 | 0.11604 | 0.00801 | 0.03034 | 0.03835 | — | 432.834 | 432.834 | 0.02642 | 0.06846 | 0.38546 | 454.280 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00102 | 0.00085 | 0.00906 | 0.00000 | 0.00000 | 0.00146 | 0.00146 | 0.00000 | 0.00034 | 0.00034 | — | 1.37508 | 1.37508 | 0.00009 | 0.00006 | 0.00260 | 1.39772 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00173 | 0.10408 | 0.03787 | 0.00051 | 0.00146 | 0.01972 | 0.02118 | 0.00146 | 0.00554 | 0.00700 | — | 71.6606 | 71.6606 | 0.00437 | 0.01133 | 0.06382 | 75.2112 |

### 3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19393 | 1.80044 | 1.71744 | 0.00370 | 0.07492 | — | 0.07492 | 0.06893 | — | 0.06893 | — | 400.322 | 400.322 | 0.01624 | 0.00325 | — | 401.696 |
| Dust From Material Movement | — | — | — | — | — | 0.22067 | 0.22067 | — | 0.08689 | 0.08689 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03539 | 0.32858 | 0.31343 | 0.00067 | 0.01367 | — | 0.01367 | 0.01258 | — | 0.01258 | — | 66.2779 | 66.2779 | 0.00269 | 0.00054 | — | 66.5053 |
| Dust From Material Movement | — | — | — | — | — | 0.04027 | 0.04027 | — | 0.01586 | 0.01586 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.57717 | 3.44242 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 7,136.65 | 7,136.65 | 0.43553 | 1.12841 | 0.37997 | 7,484.19 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00557 | 0.00464 | 0.04962 | 0.00000 | 0.00000 | 0.00797 | 0.00797 | 0.00000 | 0.00187 | 0.00187 | — | 8.30554 | 8.30554 | 0.00055 | 0.00036 | 0.01568 | 8.44229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00947 | 0.57033 | 0.20750 | 0.00280 | 0.00801 | 0.10803 | 0.11604 | 0.00801 | 0.03034 | 0.03835 | — | 432.834 | 432.834 | 0.02642 | 0.06846 | 0.38546 | 454.280 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00102 | 0.00085 | 0.00906 | 0.00000 | 0.00000 | 0.00146 | 0.00146 | 0.00000 | 0.00034 | 0.00034 | — | 1.37508 | 1.37508 | 0.00009 | 0.00006 | 0.00260 | 1.39772 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00173 | 0.10408 | 0.03787 | 0.00051 | 0.00146 | 0.01972 | 0.02118 | 0.00146 | 0.00554 | 0.00700 | — | 71.6606 | 71.6606 | 0.00437 | 0.01133 | 0.06382 | 75.2112 |

## 3.8. Grading (2026)

### 3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.17429 | 19.4466 | 19.6933 | 0.04352 | 0.80098 | — | 0.80098 | 0.73690 | — | 0.73690 | — | 4,713.27 | 4,713.27 | 0.19119 | 0.03824 | — | 4,729.44 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.39681 | 3.54901 | 3.59403 | 0.00794 | 0.14618 | — | 0.14618 | 0.13448 | — | 0.13448 | — | 780.335 | 780.335 | 0.03165 | 0.00633 | — | 783.013 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.78311 | 3.27304 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,990.82 | 6,990.82 | 0.38933 | 1.12621 | 13.7771 | 7,349.94 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.26043 | 3.31044 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,994.14 | 6,994.14 | 0.38933 | 1.12841 | 0.35732 | 7,340.49 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06280 | 0.05106 | 0.54665 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 95.9533 | 95.9533 | 0.00645 | 0.00424 | 0.17060 | 97.5493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.48576 | 2.34889 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,994.44 | 4,994.44 | 0.27810 | 0.80443 | 4.24638 | 5,245.36 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01146 | 0.00932 | 0.09976 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.8862 | 15.8862 | 0.00107 | 0.00070 | 0.02824 | 16.1504 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.18365 | 0.42867 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 826.886 | 826.886 | 0.04604 | 0.13318 | 0.70304 | 868.429 |

### 3.8.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.17429 | 19.4466 | 19.6933 | 0.04352 | 0.80098 | — | 0.80098 | 0.73690 | — | 0.73690 | — | 4,713.27 | 4,713.27 | 0.19119 | 0.03824 | — | 4,729.44 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.39681 | 3.54901 | 3.59403 | 0.00794 | 0.14618 | — | 0.14618 | 0.13448 | — | 0.13448 | — | 780.335 | 780.335 | 0.03165 | 0.00633 | — | 783.013 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.78311 | 3.27304 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,990.82 | 6,990.82 | 0.38933 | 1.12621 | 13.7771 | 7,349.94 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.26043 | 3.31044 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,994.14 | 6,994.14 | 0.38933 | 1.12841 | 0.35732 | 7,340.49 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06280 | 0.05106 | 0.54665 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 95.9533 | 95.9533 | 0.00645 | 0.00424 | 0.17060 | 97.5493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.48576 | 2.34889 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,994.44 | 4,994.44 | 0.27810 | 0.80443 | 4.24638 | 5,245.36 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01146 | 0.00932 | 0.09976 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.8862 | 15.8862 | 0.00107 | 0.00070 | 0.02824 | 16.1504 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.18365 | 0.42867 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 826.886 | 826.886 | 0.04604 | 0.13318 | 0.70304 | 868.429 |

## 3.9. Grading (2027)

### 3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.10390 | 18.2715 | 19.4869 | 0.04352 | 0.74505 | — | 0.74505 | 0.68544 | — | 0.68544 | — | 4,712.91 | 4,712.91 | 0.19118 | 0.03824 | — | 4,729.09 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38396 | 3.33455 | 3.55636 | 0.00794 | 0.13597 | — | 0.13597 | 0.12509 | — | 0.12509 | — | 780.277 | 780.277 | 0.03165 | 0.00633 | — | 782.954 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08287 | 0.05631 | 0.78818 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 139.192 | 139.192 | 0.00770 | 0.00550 | 0.50993 | 141.533 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.50596 | 3.18506 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,831.14 | 6,831.14 | 0.38933 | 1.08222 | 12.6448 | 7,176.02 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08110 | 0.07192 | 0.74671 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.220 | 131.220 | 0.00903 | 0.00594 | 0.01326 | 133.229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.94148 | 3.22025 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,834.52 | 6,834.52 | 0.38713 | 1.08222 | 0.32839 | 7,167.03 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05762 | 0.04744 | 0.50973 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 94.1685 | 94.1685 | 0.00613 | 0.00424 | 0.15738 | 95.7433 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.28936 | 2.28604 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,880.40 | 4,880.40 | 0.27810 | 0.77301 | 3.90487 | 5,121.61 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01051 | 0.00866 | 0.09303 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.5907 | 15.5907 | 0.00102 | 0.00070 | 0.02606 | 15.8514 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.14781 | 0.41720 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 808.006 | 808.006 | 0.04604 | 0.12798 | 0.64650 | 847.942 |

### 3.9.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.10390 | 18.2715 | 19.4869 | 0.04352 | 0.74505 | — | 0.74505 | 0.68544 | — | 0.68544 | — | 4,712.91 | 4,712.91 | 0.19118 | 0.03824 | — | 4,729.09 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38396 | 3.33455 | 3.55636 | 0.00794 | 0.13597 | — | 0.13597 | 0.12509 | — | 0.12509 | — | 780.277 | 780.277 | 0.03165 | 0.00633 | — | 782.954 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08287 | 0.05631 | 0.78818 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 139.192 | 139.192 | 0.00770 | 0.00550 | 0.50993 | 141.533 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.50596 | 3.18506 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,831.14 | 6,831.14 | 0.38933 | 1.08222 | 12.6448 | 7,176.02 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08110 | 0.07192 | 0.74671 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.220 | 131.220 | 0.00903 | 0.00594 | 0.01326 | 133.229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.94148 | 3.22025 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,834.52 | 6,834.52 | 0.38713 | 1.08222 | 0.32839 | 7,167.03 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05762 | 0.04744 | 0.50973 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 94.1685 | 94.1685 | 0.00613 | 0.00424 | 0.15738 | 95.7433 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.28936 | 2.28604 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,880.40 | 4,880.40 | 0.27810 | 0.77301 | 3.90487 | 5,121.61 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01051 | 0.00866 | 0.09303 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.5907 | 15.5907 | 0.00102 | 0.00070 | 0.02606 | 15.8514 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.14781 | 0.41720 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 808.006 | 808.006 | 0.04604 | 0.12798 | 0.64650 | 847.942 |

## 3.10. Grading (2028)

### 3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.06136 | 17.4254 | 19.4595 | 0.04364 | 0.70557 | — | 0.70557 | 0.64913 | — | 0.64913 | — | 4,725.96 | 4,725.96 | 0.19171 | 0.03834 | — | 4,742.17 |
| Dust From Material Movement | — | — | — | — | — | 2.60532 | 2.60532 | — | 1.02584 | 1.02584 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.37620 | 3.18014 | 3.55136 | 0.00796 | 0.12877 | — | 0.12877 | 0.11847 | — | 0.11847 | — | 782.436 | 782.436 | 0.03174 | 0.00635 | — | 785.121 |
| Dust From Material Movement | — | — | — | — | — | 0.47547 | 0.47547 | — | 0.18721 | 0.18721 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08066 | 0.05125 | 0.73672 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.661 | 136.661 | 0.00770 | 0.00550 | 0.46873 | 138.961 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.18041 | 3.05088 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,655.29 | 6,655.29 | 0.34314 | 1.03822 | 11.6382 | 6,984.89 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07890 | 0.06686 | 0.70249 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 128.846 | 128.846 | 0.00485 | 0.00594 | 0.01212 | 130.749 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.65993 | 3.08828 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,658.74 | 6,658.74 | 0.34314 | 1.03822 | 0.30134 | 6,977.01 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05556 | 0.04395 | 0.47804 | 0.00000 | 0.00000 | 0.09415 | 0.09415 | 0.00000 | 0.02204 | 0.02204 | — | 92.7206 | 92.7206 | 0.00284 | 0.00425 | 0.14498 | 94.2043 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11186 | 6.10493 | 2.19620 | 0.03308 | 0.09453 | 1.27550 | 1.37002 | 0.09453 | 0.35826 | 0.45279 | — | 4,767.84 | 4,767.84 | 0.24577 | 0.74362 | 3.59115 | 4,999.17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01014 | 0.00802 | 0.08724 | 0.00000 | 0.00000 | 0.01718 | 0.01718 | 0.00000 | 0.00402 | 0.00402 | — | 15.3510 | 15.3510 | 0.00047 | 0.00070 | 0.02400 | 15.5966 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02041 | 1.11415 | 0.40081 | 0.00604 | 0.01725 | 0.23278 | 0.25003 | 0.01725 | 0.06538 | 0.08263 | — | 789.370 | 789.370 | 0.04069 | 0.12311 | 0.59456 | 827.670 |

### 3.10.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.06136 | 17.4254 | 19.4595 | 0.04364 | 0.70557 | — | 0.70557 | 0.64913 | — | 0.64913 | — | 4,725.96 | 4,725.96 | 0.19171 | 0.03834 | — | 4,742.17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 2.60532 | 2.60532 | — | 1.02584 | 1.02584 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.37620 | 3.18014 | 3.55136 | 0.00796 | 0.12877 | — | 0.12877 | 0.11847 | — | 0.11847 | — | 782.436 | 782.436 | 0.03174 | 0.00635 | — | 785.121 |
| Dust From Material Movement | — | — | — | — | — | 0.47547 | 0.47547 | — | 0.18721 | 0.18721 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08066 | 0.05125 | 0.73672 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.661 | 136.661 | 0.00770 | 0.00550 | 0.46873 | 138.961 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.18041 | 3.05088 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,655.29 | 6,655.29 | 0.34314 | 1.03822 | 11.6382 | 6,984.89 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07890 | 0.06686 | 0.70249 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 128.846 | 128.846 | 0.00485 | 0.00594 | 0.01212 | 130.749 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.65993 | 3.08828 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,658.74 | 6,658.74 | 0.34314 | 1.03822 | 0.30134 | 6,977.01 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.05556 | 0.04395 | 0.47804 | 0.00000 | 0.00000 | 0.09415 | 0.09415 | 0.00000 | 0.02204 | 0.02204 | — | 92.7206 | 92.7206 | 0.00284 | 0.00425 | 0.14498 | 94.2043 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11186 | 6.10493 | 2.19620 | 0.03308 | 0.09453 | 1.27550 | 1.37002 | 0.09453 | 0.35826 | 0.45279 | — | 4,767.84 | 4,767.84 | 0.24577 | 0.74362 | 3.59115 | 4,999.17 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01014 | 0.00802 | 0.08724 | 0.00000 | 0.00000 | 0.01718 | 0.01718 | 0.00000 | 0.00402 | 0.00402 | — | 15.3510 | 15.3510 | 0.00047 | 0.00070 | 0.02400 | 15.5966 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02041 | 1.11415 | 0.40081 | 0.00604 | 0.01725 | 0.23278 | 0.25003 | 0.01725 | 0.06538 | 0.08263 | — | 789.370 | 789.370 | 0.04069 | 0.12311 | 0.59456 | 827.670 |

## 3.11. Grading (2029)

### 3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99451 | 16.2364 | 19.1914 | 0.04351 | 0.65439 | — | 0.65439 | 0.60204 | — | 0.60204 | — | 4,711.52 | 4,711.52 | 0.19112 | 0.03822 | — | 4,727.69 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36400 | 2.96315 | 3.50243 | 0.00794 | 0.11943 | — | 0.11943 | 0.10987 | — | 0.10987 | — | 780.046 | 780.046 | 0.03164 | 0.00633 | — | 782.723 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07714 | 0.04619 | 0.68944 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 134.241 | 134.241 | 0.00353 | 0.00550 | 0.42812 | 136.396 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 7.89886 | 2.92110 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,474.04 | 6,474.04 | 0.34094 | 1.03822 | 10.5688 | 6,802.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.07493 | 0.06180 | 0.65410 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 126.579 | 126.579 | 0.00441 | 0.00594 | 0.01111 | 128.470 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.33439 | 2.95630 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,477.56 | 6,477.56 | 0.34094 | 1.03822 | 0.27428 | 6,795.75 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05321 | 0.04022 | 0.44704 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 90.8393 | 90.8393 | 0.00283 | 0.00424 | 0.13222 | 92.3066 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 5.85572 | 2.09750 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.06285 | 0.35728 | 0.42013 | — | 4,625.37 | 4,625.37 | 0.24353 | 0.74159 | 3.26230 | 4,855.71 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00971 | 0.00734 | 0.08158 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.0395 | 15.0395 | 0.00047 | 0.00070 | 0.02189 | 15.2824 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.06867 | 0.38279 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01147 | 0.06520 | 0.07667 | — | 765.783 | 765.783 | 0.04032 | 0.12278 | 0.54011 | 803.919 |

### 3.11.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99451 | 16.2364 | 19.1914 | 0.04351 | 0.65439 | — | 0.65439 | 0.60204 | — | 0.60204 | — | 4,711.52 | 4,711.52 | 0.19112 | 0.03822 | — | 4,727.69 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36400 | 2.96315 | 3.50243 | 0.00794 | 0.11943 | — | 0.11943 | 0.10987 | — | 0.10987 | — | 780.046 | 780.046 | 0.03164 | 0.00633 | — | 782.723 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07714 | 0.04619 | 0.68944 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 134.241 | 134.241 | 0.00353 | 0.00550 | 0.42812 | 136.396 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.16057 | 7.89886 | 2.92110 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,474.04 | 6,474.04 | 0.34094 | 1.03822 | 10.5688 | 6,802.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07493 | 0.06180 | 0.65410 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 126.579 | 126.579 | 0.00441 | 0.00594 | 0.01111 | 128.470 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.33439 | 2.95630 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,477.56 | 6,477.56 | 0.34094 | 1.03822 | 0.27428 | 6,795.75 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05321 | 0.04022 | 0.44704 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 90.8393 | 90.8393 | 0.00283 | 0.00424 | 0.13222 | 92.3066 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 5.85572 | 2.09750 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.06285 | 0.35728 | 0.42013 | — | 4,625.37 | 4,625.37 | 0.24353 | 0.74159 | 3.26230 | 4,855.71 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00971 | 0.00734 | 0.08158 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.0395 | 15.0395 | 0.00047 | 0.00070 | 0.02189 | 15.2824 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.06867 | 0.38279 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01147 | 0.06520 | 0.07667 | — | 765.783 | 765.783 | 0.04032 | 0.12278 | 0.54011 | 803.919 |

## 3.12. Grading (2030)

### 3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.28715 | 10.2597 | 12.7157 | 0.02885 | 0.41900 | — | 0.41900 | 0.38548 | — | 0.38548 | — | 3,123.75 | 3,123.75 | 0.12671 | 0.02534 | — | 3,134.47 |
| Dust From Material Movement | — | — | — | — | — | 1.72264 | 1.72264 | — | 0.67828 | 0.67828 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23490 | 1.87240 | 2.32061 | 0.00526 | 0.07647 | — | 0.07647 | 0.07035 | — | 0.07035 | — | 517.173 | 517.173 | 0.02098 | 0.00420 | — | 518.947 |
| Dust From Material Movement | — | — | — | — | — | 0.31438 | 0.31438 | — | 0.12379 | 0.12379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07317 | 0.04157 | 0.64722 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.941 | 131.941 | 0.00309 | 0.00550 | 0.38931 | 134.046 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11658 | 7.66130 | 2.78913 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,294.45 | 6,294.45 | 0.29475 | 0.99423 | 9.56222 | 6,607.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07273 | 0.05675 | 0.61449 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 124.423 | 124.423 | 0.00441 | 0.00594 | 0.01009 | 126.314 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.10778 | 8.09903 | 2.82432 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,298.02 | 6,298.02 | 0.29475 | 0.99423 | 0.24849 | 6,601.92 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03382 | 0.02427 | 0.27670 | 0.00000 | 0.00000 | 0.06225 | 0.06225 | 0.00000 | 0.01457 | 0.01457 | — | 59.2029 | 59.2029 | 0.00167 | 0.00260 | 0.07974 | 60.1004 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.05313 | 3.77096 | 1.32817 | 0.02188 | 0.06250 | 0.84336 | 0.90586 | 0.04167 | 0.23688 | 0.27855 | — | 2,981.64 | 2,981.64 | 0.13959 | 0.47085 | 1.96036 | 3,127.41 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00617 | 0.00443 | 0.05050 | 0.00000 | 0.00000 | 0.01136 | 0.01136 | 0.00000 | 0.00266 | 0.00266 | — | 9.80172 | 9.80172 | 0.00028 | 0.00043 | 0.01320 | 9.95031 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00970 | 0.68820 | 0.24239 | 0.00399 | 0.01141 | 0.15391 | 0.16532 | 0.00760 | 0.04323 | 0.05084 | — | 493.645 | 493.645 | 0.02311 | 0.07795 | 0.32456 | 517.778 |

### 3.12.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.28715 | 10.2597 | 12.7157 | 0.02885 | 0.41900 | — | 0.41900 | 0.38548 | — | 0.38548 | — | 3,123.75 | 3,123.75 | 0.12671 | 0.02534 | — | 3,134.47 |
| Dust From Material Movement | — | — | — | — | — | 1.72264 | 1.72264 | — | 0.67828 | 0.67828 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23490 | 1.87240 | 2.32061 | 0.00526 | 0.07647 | — | 0.07647 | 0.07035 | — | 0.07035 | — | 517.173 | 517.173 | 0.02098 | 0.00420 | — | 518.947 |
| Dust From Material Movement | — | — | — | — | — | 0.31438 | 0.31438 | — | 0.12379 | 0.12379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07317 | 0.04157 | 0.64722 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.941 | 131.941 | 0.00309 | 0.00550 | 0.38931 | 134.046 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11658 | 7.66130 | 2.78913 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,294.45 | 6,294.45 | 0.29475 | 0.99423 | 9.56222 | 6,607.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07273 | 0.05675 | 0.61449 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 124.423 | 124.423 | 0.00441 | 0.00594 | 0.01009 | 126.314 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.10778 | 8.09903 | 2.82432 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,298.02 | 6,298.02 | 0.29475 | 0.99423 | 0.24849 | 6,601.92 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03382 | 0.02427 | 0.27670 | 0.00000 | 0.00000 | 0.06225 | 0.06225 | 0.00000 | 0.01457 | 0.01457 | — | 59.2029 | 59.2029 | 0.00167 | 0.00260 | 0.07974 | 60.1004 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.05313 | 3.77096 | 1.32817 | 0.02188 | 0.06250 | 0.84336 | 0.90586 | 0.04167 | 0.23688 | 0.27855 | — | 2,981.64 | 2,981.64 | 0.13959 | 0.47085 | 1.96036 | 3,127.41 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00617 | 0.00443 | 0.05050 | 0.00000 | 0.00000 | 0.01136 | 0.01136 | 0.00000 | 0.00266 | 0.00266 | — | 9.80172 | 9.80172 | 0.00028 | 0.00043 | 0.01320 | 9.95031 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00970 | 0.68820 | 0.24239 | 0.00399 | 0.01141 | 0.15391 | 0.16532 | 0.00760 | 0.04323 | 0.05084 | — | 493.645 | 493.645 | 0.02311 | 0.07795 | 0.32456 | 517.778 |

## 3.13. Building Construction (2023)

### 3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 48.5765 | 36.3113 | 473.902 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 67,587.8 | 67,587.8 | 4.06060 | 2.67202 | 311.614 | 68,797.2 |
| Vendor | 1.50560 | 42.0795 | 21.9716 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,193.0 | 27,193.0 | 1.24141 | 3.96515 | 69.0780 | 28,474.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 46.1028 | 45.8092 | 448.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,673.1 | 63,673.1 | 4.65571 | 2.87039 | 8.05898 | 64,652.9 |
| Vendor | 1.38779 | 44.4445 | 22.4117 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,212.2 | 27,212.2 | 1.21196 | 3.96515 | 1.79552 | 28,425.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.6133 | 30.7279 | 305.103 | 0.00000 | 0.00000 | 42.1247 | 42.1247 | 0.00000 | 9.86211 | 9.86211 | — | 45,566.3 | 45,566.3 | 3.17509 | 1.90336 | 95.6773 | 46,308.6 |
| Vendor | 1.03052 | 31.1753 | 15.6707 | 0.12651 | 0.25301 | 4.74149 | 4.99450 | 0.25301 | 1.31188 | 1.56489 | — | 19,376.0 | 19,376.0 | 0.88429 | 2.82449 | 21.3468 | 20,261.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.13442 | 5.60784 | 55.6812 | 0.00000 | 0.00000 | 7.68776 | 7.68776 | 0.00000 | 1.79984 | 1.79984 | — | 7,544.02 | 7,544.02 | 0.52567 | 0.31512 | 15.8405 | 7,666.91 |
| Vendor | 0.18807 | 5.68950 | 2.85991 | 0.02309 | 0.04618 | 0.86532 | 0.91150 | 0.04618 | 0.23942 | 0.28559 | — | 3,207.92 | 3,207.92 | 0.14640 | 0.46763 | 3.53421 | 3,354.47 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 48.5765 | 36.3113 | 473.902 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 67,587.8 | 67,587.8 | 4.06060 | 2.67202 | 311.614 | 68,797.2 |
| Vendor | 1.50560 | 42.0795 | 21.9716 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,193.0 | 27,193.0 | 1.24141 | 3.96515 | 69.0780 | 28,474.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 46.1028 | 45.8092 | 448.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,673.1 | 63,673.1 | 4.65571 | 2.87039 | 8.05898 | 64,652.9 |
| Vendor | 1.38779 | 44.4445 | 22.4117 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,212.2 | 27,212.2 | 1.21196 | 3.96515 | 1.79552 | 28,425.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.6133 | 30.7279 | 305.103 | 0.00000 | 0.00000 | 42.1247 | 42.1247 | 0.00000 | 9.86211 | 9.86211 | — | 45,566.3 | 45,566.3 | 3.17509 | 1.90336 | 95.6773 | 46,308.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 1.03052 | 31.1753 | 15.6707 | 0.12651 | 0.25301 | 4.74149 | 4.99450 | 0.25301 | 1.31188 | 1.56489 | — | 19,376.0 | 19,376.0 | 0.88429 | 2.82449 | 21.3468 | 20,261.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.13442 | 5.60784 | 55.6812 | 0.00000 | 0.00000 | 7.68776 | 7.68776 | 0.00000 | 1.79984 | 1.79984 | — | 7,544.02 | 7,544.02 | 0.52567 | 0.31512 | 15.8405 | 7,666.91 |
| Vendor | 0.18807 | 5.68950 | 2.85991 | 0.02309 | 0.04618 | 0.86532 | 0.91150 | 0.04618 | 0.23942 | 0.28559 | — | 3,207.92 | 3,207.92 | 0.14640 | 0.46763 | 3.53421 | 3,354.47 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.14. Building Construction (2024)

### 3.14.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 44.7142 | 32.1575 | 439.773 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 66,330.6 | 66,330.6 | 3.86223 | 2.67202 | 290.123 | 67,513.6 |
| Vendor | 1.47614 | 40.4223 | 20.3741 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,800.1 | 26,800.1 | 1.18251 | 3.96515 | 69.0780 | 28,080.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 43.9208 | 41.4570 | 416.895 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,505.2 | 62,505.2 | 4.65571 | 2.67202 | 7.52171 | 63,425.4 |
| Vendor | 1.21019 | 42.6097 | 20.7847 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,821.5 | 26,821.5 | 1.21196 | 3.96515 | 1.79044 | 28,035.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.0317 | 27.7795 | 283.604 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 44,976.9 | 44,976.9 | 3.05046 | 1.91382 | 89.6612 | 45,713.2 |
| Vendor | 1.01509 | 29.9052 | 14.7188 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 19,201.7 | 19,201.7 | 0.86806 | 2.84001 | 21.2822 | 20,091.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.66328 | 5.06975 | 51.7578 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 7,446.45 | 7,446.45 | 0.50504 | 0.31685 | 14.8444 | 7,568.34 |
| Vendor | 0.18525 | 5.45770 | 2.68618 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 3,179.06 | 3,179.06 | 0.14372 | 0.47020 | 3.52352 | 3,326.29 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 44.7142 | 32.1575 | 439.773 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 66,330.6 | 66,330.6 | 3.86223 | 2.67202 | 290.123 | 67,513.6 |
| Vendor | 1.47614 | 40.4223 | 20.3741 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,800.1 | 26,800.1 | 1.18251 | 3.96515 | 69.0780 | 28,080.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 43.9208 | 41.4570 | 416.895 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,505.2 | 62,505.2 | 4.65571 | 2.67202 | 7.52171 | 63,425.4 |
| Vendor | 1.21019 | 42.6097 | 20.7847 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,821.5 | 26,821.5 | 1.21196 | 3.96515 | 1.79044 | 28,035.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.0317 | 27.7795 | 283.604 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 44,976.9 | 44,976.9 | 3.05046 | 1.91382 | 89.6612 | 45,713.2 |
| Vendor | 1.01509 | 29.9052 | 14.7188 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 19,201.7 | 19,201.7 | 0.86806 | 2.84001 | 21.2822 | 20,091.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.66328 | 5.06975 | 51.7578 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 7,446.45 | 7,446.45 | 0.50504 | 0.31685 | 14.8444 | 7,568.34 |
| Vendor | 0.18525 | 5.45770 | 2.68618 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 3,179.06 | 3,179.06 | 0.14372 | 0.47020 | 3.52352 | 3,326.29 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.15. Building Construction (2025)

### 3.15.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.7305 | 29.6839 | 407.919 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 65,049.3 | 65,049.3 | 3.66386 | 2.67202 | 268.633 | 66,205.7 |
| Vendor | 1.23964 | 38.5285 | 18.9837 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,327.0 | 26,327.0 | 1.18251 | 3.78755 | 68.5701 | 27,553.8 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.1354 | 38.9834 | 387.304 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,308.1 | 61,308.1 | 4.45734 | 2.67202 | 6.98445 | 62,222.7 |
| Vendor | 1.21019 | 40.5678 | 19.5130 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,350.5 | 26,350.5 | 1.18251 | 3.78755 | 1.78282 | 27,510.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 29.5300 | 24.5949 | 262.827 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,995.4 | 43,995.4 | 2.90043 | 1.90859 | 83.0842 | 44,719.8 |
| Vendor | 0.88546 | 28.4708 | 13.7912 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,812.0 | 18,812.0 | 0.84465 | 2.70539 | 21.2241 | 19,660.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.38922 | 4.48856 | 47.9659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,283.94 | 7,283.94 | 0.48020 | 0.31599 | 13.7555 | 7,403.87 |
| Vendor | 0.16160 | 5.19592 | 2.51689 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,114.54 | 3,114.54 | 0.13984 | 0.44791 | 3.51389 | 3,255.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.7305 | 29.6839 | 407.919 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 65,049.3 | 65,049.3 | 3.66386 | 2.67202 | 268.633 | 66,205.7 |
| Vendor | 1.23964 | 38.5285 | 18.9837 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,327.0 | 26,327.0 | 1.18251 | 3.78755 | 68.5701 | 27,553.8 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.1354 | 38.9834 | 387.304 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,308.1 | 61,308.1 | 4.45734 | 2.67202 | 6.98445 | 62,222.7 |
| Vendor | 1.21019 | 40.5678 | 19.5130 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,350.5 | 26,350.5 | 1.18251 | 3.78755 | 1.78282 | 27,510.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 29.5300 | 24.5949 | 262.827 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,995.4 | 43,995.4 | 2.90043 | 1.90859 | 83.0842 | 44,719.8 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.88546 | 28.4708 | 13.7912 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,812.0 | 18,812.0 | 0.84465 | 2.70539 | 21.2241 | 19,660.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.38922 | 4.48856 | 47.9659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,283.94 | 7,283.94 | 0.48020 | 0.31599 | 13.7555 | 7,403.87 |
| Vendor | 0.16160 | 5.19592 | 2.51689 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,114.54 | 3,114.54 | 0.13984 | 0.44791 | 3.51389 | 3,255.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.16. Building Construction (2026)

### 3.16.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.9452 | 27.4086 | 380.219 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,815.6 | 63,815.6 | 3.66386 | 2.67202 | 249.022 | 64,952.5 |
| Vendor | 1.21019 | 36.8123 | 17.7709 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,835.6 | 25,835.6 | 1.18251 | 3.78755 | 62.2210 | 27,056.1 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.1518 | 34.6312 | 360.584 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,155.5 | 60,155.5 | 4.25897 | 2.67202 | 6.44718 | 61,064.7 |
| Vendor | 1.12183 | 38.8516 | 18.2412 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,860.8 | 25,860.8 | 1.15305 | 3.78755 | 1.61521 | 27,019.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 28.2547 | 22.9696 | 245.933 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,168.6 | 43,168.6 | 2.90043 | 1.90859 | 76.7521 | 43,886.6 |
| Vendor | 0.84338 | 27.2450 | 12.9039 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,461.5 | 18,461.5 | 0.84465 | 2.70539 | 19.2287 | 19,308.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.15649 | 4.19196 | 44.8828 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,147.06 | 7,147.06 | 0.48020 | 0.31599 | 12.7072 | 7,265.93 |
| Vendor | 0.15392 | 4.97221 | 2.35495 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,056.51 | 3,056.51 | 0.13984 | 0.44791 | 3.18352 | 3,196.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.9452 | 27.4086 | 380.219 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,815.6 | 63,815.6 | 3.66386 | 2.67202 | 249.022 | 64,952.5 |
| Vendor | 1.21019 | 36.8123 | 17.7709 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,835.6 | 25,835.6 | 1.18251 | 3.78755 | 62.2210 | 27,056.1 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.1518 | 34.6312 | 360.584 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,155.5 | 60,155.5 | 4.25897 | 2.67202 | 6.44718 | 61,064.7 |
| Vendor | 1.12183 | 38.8516 | 18.2412 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,860.8 | 25,860.8 | 1.15305 | 3.78755 | 1.61521 | 27,019.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 28.2547 | 22.9696 | 245.933 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,168.6 | 43,168.6 | 2.90043 | 1.90859 | 76.7521 | 43,886.6 |
| Vendor | 0.84338 | 27.2450 | 12.9039 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,461.5 | 18,461.5 | 0.84465 | 2.70539 | 19.2287 | 19,308.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.15649 | 4.19196 | 44.8828 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,147.06 | 7,147.06 | 0.48020 | 0.31599 | 12.7072 | 7,265.93 |
| Vendor | 0.15392 | 4.97221 | 2.35495 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,056.51 | 3,056.51 | 0.13984 | 0.44791 | 3.18352 | 3,196.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.17. Building Construction (2027)

### 3.17.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 37.2814 | 25.3316 | 354.595 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,621.2 | 62,621.2 | 3.46550 | 2.47365 | 229.412 | 63,674.4 |
| Vendor | 1.03259 | 35.2148 | 16.9132 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,283.7 | 25,283.7 | 0.97546 | 3.60996 | 55.1101 | 26,439.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.4879 | 32.3559 | 335.941 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,034.8 | 59,034.8 | 4.06060 | 2.67202 | 5.96364 | 59,938.5 |
| Vendor | 0.94424 | 37.2835 | 17.3541 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,309.9 | 25,309.9 | 0.97546 | 3.60996 | 1.43235 | 26,411.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 25.9211 | 21.3444 | 229.322 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 42,365.6 | 42,365.6 | 2.75874 | 1.90859 | 70.8039 | 43,074.2 |
| Vendor | 0.69549 | 26.1039 | 12.1644 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,067.6 | 18,067.6 | 0.69675 | 2.57854 | 17.0155 | 18,870.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.73060 | 3.89536 | 41.8513 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,014.11 | 7,014.11 | 0.45674 | 0.31599 | 11.7224 | 7,131.42 |
| Vendor | 0.12693 | 4.76396 | 2.22000 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,991.30 | 2,991.30 | 0.11536 | 0.42691 | 2.81712 | 3,124.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 37.2814 | 25.3316 | 354.595 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,621.2 | 62,621.2 | 3.46550 | 2.47365 | 229.412 | 63,674.4 |
| Vendor | 1.03259 | 35.2148 | 16.9132 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,283.7 | 25,283.7 | 0.97546 | 3.60996 | 55.1101 | 26,439.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.4879 | 32.3559 | 335.941 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,034.8 | 59,034.8 | 4.06060 | 2.67202 | 5.96364 | 59,938.5 |
| Vendor | 0.94424 | 37.2835 | 17.3541 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,309.9 | 25,309.9 | 0.97546 | 3.60996 | 1.43235 | 26,411.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 25.9211 | 21.3444 | 229.322 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 42,365.6 | 42,365.6 | 2.75874 | 1.90859 | 70.8039 | 43,074.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.69549 | 26.1039 | 12.1644 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,067.6 | 18,067.6 | 0.69675 | 2.57854 | 17.0155 | 18,870.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.73060 | 3.89536 | 41.8513 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,014.11 | 7,014.11 | 0.45674 | 0.31599 | 11.7224 | 7,131.42 |
| Vendor | 0.12693 | 4.76396 | 2.22000 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,991.30 | 2,991.30 | 0.11536 | 0.42691 | 2.81712 | 3,124.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.18. Building Construction (2028)

### 3.18.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.2895 | 23.0564 | 331.446 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,482.8 | 61,482.8 | 3.46550 | 2.47365 | 210.877 | 62,517.4 |
| Vendor | 1.00314 | 33.7655 | 15.9074 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,651.0 | 24,651.0 | 0.97546 | 3.58050 | 49.0149 | 25,791.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 35.4960 | 30.0806 | 316.047 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 57,966.7 | 57,966.7 | 2.18205 | 2.67202 | 5.45324 | 58,823.0 |
| Vendor | 0.94424 | 35.6566 | 16.4670 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,678.5 | 24,678.5 | 0.97546 | 3.60996 | 1.27236 | 25,779.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 24.9975 | 19.7733 | 215.066 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 41,714.3 | 41,714.3 | 1.27872 | 1.91382 | 65.2257 | 42,381.8 |
| Vendor | 0.69740 | 25.0101 | 11.5623 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 17,664.3 | 17,664.3 | 0.69866 | 2.58560 | 15.1704 | 18,467.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.56205 | 3.60862 | 39.2496 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 6,906.27 | 6,906.27 | 0.21171 | 0.31685 | 10.7989 | 7,016.79 |
| Vendor | 0.12728 | 4.56435 | 2.11013 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 2,924.52 | 2,924.52 | 0.11567 | 0.42808 | 2.51163 | 3,057.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.2895 | 23.0564 | 331.446 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,482.8 | 61,482.8 | 3.46550 | 2.47365 | 210.877 | 62,517.4 |
| Vendor | 1.00314 | 33.7655 | 15.9074 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,651.0 | 24,651.0 | 0.97546 | 3.58050 | 49.0149 | 25,791.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 35.4960 | 30.0806 | 316.047 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 57,966.7 | 57,966.7 | 2.18205 | 2.67202 | 5.45324 | 58,823.0 |
| Vendor | 0.94424 | 35.6566 | 16.4670 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,678.5 | 24,678.5 | 0.97546 | 3.60996 | 1.27236 | 25,779.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 24.9975 | 19.7733 | 215.066 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 41,714.3 | 41,714.3 | 1.27872 | 1.91382 | 65.2257 | 42,381.8 |
| Vendor | 0.69740 | 25.0101 | 11.5623 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 17,664.3 | 17,664.3 | 0.69866 | 2.58560 | 15.1704 | 18,467.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.56205 | 3.60862 | 39.2496 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 6,906.27 | 6,906.27 | 0.21171 | 0.31685 | 10.7989 | 7,016.79 |
| Vendor | 0.12728 | 4.56435 | 2.11013 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 2,924.52 | 2,924.52 | 0.11567 | 0.42808 | 2.51163 | 3,057.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19. Building Construction (2029)

### 3.19.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 34.7026 | 20.7811 | 310.175 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,394.0 | 60,394.0 | 1.58695 | 2.47365 | 192.610 | 61,363.4 |
| Vendor | 1.00314 | 32.2572 | 15.0792 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,959.1 | 23,959.1 | 0.94600 | 3.40291 | 43.4277 | 25,040.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.7107 | 27.8053 | 294.274 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 56,946.9 | 56,946.9 | 1.98368 | 2.67202 | 4.99656 | 57,797.7 |
| Vendor | 0.91479 | 34.0297 | 15.6094 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,987.7 | 23,987.7 | 0.94600 | 3.43236 | 1.12506 | 25,035.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 23.9374 | 18.0940 | 201.119 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,867.9 | 40,867.9 | 1.27523 | 1.90859 | 59.4829 | 41,528.0 |
| Vendor | 0.69549 | 23.7587 | 10.9602 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 17,122.1 | 17,122.1 | 0.67572 | 2.43065 | 13.3875 | 17,876.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.36858 | 3.30216 | 36.7042 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,766.14 | 6,766.14 | 0.21113 | 0.31599 | 9.84807 | 6,875.43 |
| Vendor | 0.12693 | 4.33596 | 2.00024 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,834.76 | 2,834.76 | 0.11187 | 0.40242 | 2.21645 | 2,959.70 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 34.7026 | 20.7811 | 310.175 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,394.0 | 60,394.0 | 1.58695 | 2.47365 | 192.610 | 61,363.4 |
| Vendor | 1.00314 | 32.2572 | 15.0792 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,959.1 | 23,959.1 | 0.94600 | 3.40291 | 43.4277 | 25,040.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.7107 | 27.8053 | 294.274 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 56,946.9 | 56,946.9 | 1.98368 | 2.67202 | 4.99656 | 57,797.7 |
| Vendor | 0.91479 | 34.0297 | 15.6094 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,987.7 | 23,987.7 | 0.94600 | 3.43236 | 1.12506 | 25,035.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 23.9374 | 18.0940 | 201.119 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,867.9 | 40,867.9 | 1.27523 | 1.90859 | 59.4829 | 41,528.0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.69549 | 23.7587 | 10.9602 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 17,122.1 | 17,122.1 | 0.67572 | 2.43065 | 13.3875 | 17,876.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.36858 | 3.30216 | 36.7042 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,766.14 | 6,766.14 | 0.21113 | 0.31599 | 9.84807 | 6,875.43 |
| Vendor | 0.12693 | 4.33596 | 2.00024 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,834.76 | 2,834.76 | 0.11187 | 0.40242 | 2.21645 | 2,959.70 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.20. Building Construction (2030)

### 3.20.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.9173 | 18.7042 | 291.179 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,359.2 | 59,359.2 | 1.38858 | 2.47365 | 175.148 | 60,306.2 |
| Vendor | 0.97369 | 30.9855 | 14.4581 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,224.8 | 23,224.8 | 0.76841 | 3.40291 | 38.0945 | 24,296.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.7189 | 25.5300 | 276.456 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,977.0 | 55,977.0 | 1.98368 | 2.67202 | 4.53989 | 56,827.4 |
| Vendor | 0.91479 | 32.7579 | 14.9588 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,254.4 | 23,254.4 | 0.76841 | 3.40291 | 0.99046 | 24,288.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.9456 | 16.4688 | 187.759 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,172.5 | 40,172.5 | 1.13353 | 1.76690 | 54.1103 | 40,781.5 |
| Vendor | 0.69549 | 22.8713 | 10.4955 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 16,598.0 | 16,598.0 | 0.54886 | 2.43065 | 11.7730 | 17,347.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.18756 | 3.00556 | 34.2659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,651.02 | 6,651.02 | 0.18767 | 0.29253 | 8.95857 | 6,751.84 |
| Vendor | 0.12693 | 4.17402 | 1.91543 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,747.99 | 2,747.99 | 0.09087 | 0.40242 | 1.94916 | 2,872.14 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.9173 | 18.7042 | 291.179 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,359.2 | 59,359.2 | 1.38858 | 2.47365 | 175.148 | 60,306.2 |
| Vendor | 0.97369 | 30.9855 | 14.4581 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,224.8 | 23,224.8 | 0.76841 | 3.40291 | 38.0945 | 24,296.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.7189 | 25.5300 | 276.456 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,977.0 | 55,977.0 | 1.98368 | 2.67202 | 4.53989 | 56,827.4 |
| Vendor | 0.91479 | 32.7579 | 14.9588 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,254.4 | 23,254.4 | 0.76841 | 3.40291 | 0.99046 | 24,288.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.9456 | 16.4688 | 187.759 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,172.5 | 40,172.5 | 1.13353 | 1.76690 | 54.1103 | 40,781.5 |
| Vendor | 0.69549 | 22.8713 | 10.4955 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 16,598.0 | 16,598.0 | 0.54886 | 2.43065 | 11.7730 | 17,347.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.18756 | 3.00556 | 34.2659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,651.02 | 6,651.02 | 0.18767 | 0.29253 | 8.95857 | 6,751.84 |
| Vendor | 0.12693 | 4.17402 | 1.91543 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,747.99 | 2,747.99 | 0.09087 | 0.40242 | 1.94916 | 2,872.14 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.21. Building Construction (2031)

### 3.21.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.5287 | 16.4289 | 271.985 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 58,393.3 | 58,393.3 | 1.38858 | 2.47365 | 158.762 | 59,323.9 |
| Vendor | 0.79609 | 29.7137 | 13.8369 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,477.9 | 22,477.9 | 0.76841 | 3.22531 | 33.0152 | 23,491.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 30.9336 | 23.4531 | 256.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,068.7 | 55,068.7 | 1.78532 | 2.67202 | 4.11008 | 55,913.7 |
| Vendor | 0.73719 | 31.5156 | 14.3376 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,508.2 | 22,508.2 | 0.76841 | 3.22531 | 0.85840 | 23,489.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.8120 | 14.9853 | 175.882 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 39,521.1 | 39,521.1 | 1.13353 | 1.76690 | 48.9295 | 40,124.9 |
| Vendor | 0.54760 | 21.9629 | 10.0518 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.12685 | 1.31548 | 1.44234 | — | 16,064.7 | 16,064.7 | 0.54886 | 2.30379 | 10.2130 | 16,775.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.98069 | 2.73482 | 32.0985 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,543.17 | 6,543.17 | 0.18767 | 0.29253 | 8.10084 | 6,643.14 |
| Vendor | 0.09994 | 4.00823 | 1.83446 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.02315 | 0.24008 | 0.26323 | — | 2,659.70 | 2,659.70 | 0.09087 | 0.38142 | 1.69087 | 2,777.33 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.5287 | 16.4289 | 271.985 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 58,393.3 | 58,393.3 | 1.38858 | 2.47365 | 158.762 | 59,323.9 |
| Vendor | 0.79609 | 29.7137 | 13.8369 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,477.9 | 22,477.9 | 0.76841 | 3.22531 | 33.0152 | 23,491.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 30.9336 | 23.4531 | 256.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,068.7 | 55,068.7 | 1.78532 | 2.67202 | 4.11008 | 55,913.7 |
| Vendor | 0.73719 | 31.5156 | 14.3376 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,508.2 | 22,508.2 | 0.76841 | 3.22531 | 0.85840 | 23,489.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.8120 | 14.9853 | 175.882 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 39,521.1 | 39,521.1 | 1.13353 | 1.76690 | 48.9295 | 40,124.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.54760 | 21.9629 | 10.0518 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.12685 | 1.31548 | 1.44234 | — | 16,064.7 | 16,064.7 | 0.54886 | 2.30379 | 10.2130 | 16,775.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.98069 | 2.73482 | 32.0985 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,543.17 | 6,543.17 | 0.18767 | 0.29253 | 8.10084 | 6,643.14 |
| Vendor | 0.09994 | 4.00823 | 1.83446 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.02315 | 0.24008 | 0.26323 | — | 2,659.70 | 2,659.70 | 0.09087 | 0.38142 | 1.69087 | 2,777.33 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.22. Paving (2028)

### 3.22.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28697 | 2.77552 | 4.15013 | 0.00584 | 0.10702 | — | 0.10702 | 0.09846 | — | 0.09846 | — | 632.799 | 632.799 | 0.02567 | 0.00513 | — | 634.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05237 | 0.50653 | 0.75740 | 0.00107 | 0.01953 | — | 0.01953 | 0.01797 | — | 0.01797 | — | 104.767 | 104.767 | 0.00425 | 0.00085 | — | 105.127 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02437 | 0.01927 | 0.20963 | 0.00000 | 0.00000 | 0.04129 | 0.04129 | 0.00000 | 0.00967 | 0.00967 | — | 40.6603 | 40.6603 | 0.00125 | 0.00187 | 0.06358 | 41.3109 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00445 | 0.00352 | 0.03826 | 0.00000 | 0.00000 | 0.00753 | 0.00753 | 0.00000 | 0.00176 | 0.00176 | — | 6.73177 | 6.73177 | 0.00021 | 0.00031 | 0.01053 | 6.83949 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28697 | 2.77552 | 4.15013 | 0.00584 | 0.10702 | — | 0.10702 | 0.09846 | — | 0.09846 | — | 632.799 | 632.799 | 0.02567 | 0.00513 | — | 634.971 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05237 | 0.50653 | 0.75740 | 0.00107 | 0.01953 | — | 0.01953 | 0.01797 | — | 0.01797 | — | 104.767 | 104.767 | 0.00425 | 0.00085 | — | 105.127 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02437 | 0.01927 | 0.20963 | 0.00000 | 0.00000 | 0.04129 | 0.04129 | 0.00000 | 0.00967 | 0.00967 | — | 40.6603 | 40.6603 | 0.00125 | 0.00187 | 0.06358 | 41.3109 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00445 | 0.00352 | 0.03826 | 0.00000 | 0.00000 | 0.00753 | 0.00753 | 0.00000 | 0.00176 | 0.00176 | — | 6.73177 | 6.73177 | 0.00021 | 0.00031 | 0.01053 | 6.83949 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.23. Paving (2029)

## 3.23.1. Onsite - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.48044 | 4.61298 | 7.08458 | 0.00996 | 0.17074 | — | 0.17074 | 0.15709 | — | 0.15709 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08768 | 0.84187 | 1.29294 | 0.00182 | 0.03116 | — | 0.03116 | 0.02867 | — | 0.02867 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03991 | 0.03016 | 0.33528 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 68.1295 | 68.1295 | 0.00213 | 0.00318 | 0.09916 | 69.2299 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00728 | 0.00550 | 0.06119 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.2796 | 11.2796 | 0.00035 | 0.00053 | 0.01642 | 11.4618 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.48044 | 4.61298 | 7.08458 | 0.00996 | 0.17074 | — | 0.17074 | 0.15709 | — | 0.15709 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08768 | 0.84187 | 1.29294 | 0.00182 | 0.03116 | — | 0.03116 | 0.02867 | — | 0.02867 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03991 | 0.03016 | 0.33528 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 68.1295 | 68.1295 | 0.00213 | 0.00318 | 0.09916 | 69.2299 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00728 | 0.00550 | 0.06119 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.2796 | 11.2796 | 0.00035 | 0.00053 | 0.01642 | 11.4618 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.24. Paving (2030)

### 3.24.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.46008 | 4.48585 | 7.06831 | 0.00996 | 0.15740 | — | 0.15740 | 0.14480 | — | 0.14480 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08396 | 0.81867 | 1.28997 | 0.00182 | 0.02872 | — | 0.02872 | 0.02643 | — | 0.02643 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.05488 | 0.03118 | 0.48541 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 98.9558 | 98.9558 | 0.00231 | 0.00412 | 0.29198 | 100.535 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05454 | 0.04256 | 0.46087 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 93.3175 | 93.3175 | 0.00331 | 0.00445 | 0.00757 | 94.7351 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03825 | 0.02745 | 0.31301 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 66.9703 | 66.9703 | 0.00189 | 0.00295 | 0.09021 | 67.9855 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00698 | 0.00501 | 0.05712 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.0877 | 11.0877 | 0.00031 | 0.00049 | 0.01493 | 11.2558 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.46008 | 4.48585 | 7.06831 | 0.00996 | 0.15740 | — | 0.15740 | 0.14480 | — | 0.14480 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08396 | 0.81867 | 1.28997 | 0.00182 | 0.02872 | — | 0.02872 | 0.02643 | — | 0.02643 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05488 | 0.03118 | 0.48541 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 98.9558 | 98.9558 | 0.00231 | 0.00412 | 0.29198 | 100.535 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05454 | 0.04256 | 0.46087 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 93.3175 | 93.3175 | 0.00331 | 0.00445 | 0.00757 | 94.7351 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03825 | 0.02745 | 0.31301 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 66.9703 | 66.9703 | 0.00189 | 0.00295 | 0.09021 | 67.9855 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00698 | 0.00501 | 0.05712 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.0877 | 11.0877 | 0.00031 | 0.00049 | 0.01493 | 11.2558 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.25. Paving (2031)

### 3.25.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.35371 | 3.45229 | 5.57025 | 0.00786 | 0.11825 | — | 0.11825 | 0.10879 | — | 0.10879 | — | 851.392 | 851.392 | 0.03454 | 0.00691 | — | 854.313 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06455 | 0.63004 | 1.01657 | 0.00143 | 0.02158 | — | 0.02158 | 0.01985 | — | 0.01985 | — | 140.958 | 140.958 | 0.00572 | 0.00114 | — | 141.441 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05256 | 0.02739 | 0.45342 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 97.3455 | 97.3455 | 0.00231 | 0.00412 | 0.26467 | 98.8969 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05157 | 0.03910 | 0.42837 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 91.8032 | 91.8032 | 0.00298 | 0.00445 | 0.00685 | 93.2119 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02869 | 0.01971 | 0.23135 | 0.00000 | 0.00000 | 0.05556 | 0.05556 | 0.00000 | 0.01301 | 0.01301 | — | 51.9854 | 51.9854 | 0.00149 | 0.00232 | 0.06436 | 52.7797 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00524 | 0.00360 | 0.04222 | 0.00000 | 0.00000 | 0.01014 | 0.01014 | 0.00000 | 0.00237 | 0.00237 | — | 8.60678 | 8.60678 | 0.00025 | 0.00038 | 0.01066 | 8.73828 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.35371 | 3.45229 | 5.57025 | 0.00786 | 0.11825 | — | 0.11825 | 0.10879 | — | 0.10879 | — | 851.392 | 851.392 | 0.03454 | 0.00691 | — | 854.313 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06455 | 0.63004 | 1.01657 | 0.00143 | 0.02158 | — | 0.02158 | 0.01985 | — | 0.01985 | — | 140.958 | 140.958 | 0.00572 | 0.00114 | — | 141.441 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05256 | 0.02739 | 0.45342 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 97.3455 | 97.3455 | 0.00231 | 0.00412 | 0.26467 | 98.8969 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05157 | 0.03910 | 0.42837 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 91.8032 | 91.8032 | 0.00298 | 0.00445 | 0.00685 | 93.2119 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02869 | 0.01971 | 0.23135 | 0.00000 | 0.00000 | 0.05556 | 0.05556 | 0.00000 | 0.01301 | 0.01301 | — | 51.9854 | 51.9854 | 0.00149 | 0.00232 | 0.06436 | 52.7797 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00524 | 0.00360 | 0.04222 | 0.00000 | 0.00000 | 0.01014 | 0.01014 | 0.00000 | 0.00237 | 0.00237 | — | 8.60678 | 8.60678 | 0.00025 | 0.00038 | 0.01066 | 8.73828 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.26. Architectural Coating (2028)

### 3.26.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04494 | 0.33844 | 0.46834 | 0.00072 | 0.00643 | — | 0.00643 | 0.00592 | — | 0.00592 | — | 55.9152 | 55.9152 | 0.00227 | 0.00045 | — | 56.1070 |
| Architectural Coatings | 167.695 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00820 | 0.06177 | 0.08547 | 0.00013 | 0.00117 | — | 0.00117 | 0.00108 | — | 0.00108 | — | 9.25739 | 9.25739 | 0.00038 | 0.00008 | — | 9.28916 |
| Architectural Coatings | 30.6043 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.25790 | 4.61127 | 66.2892 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,296.6 | 12,296.6 | 0.69310 | 0.49473 | 42.1753 | 12,503.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.09921 | 6.01612 | 63.2093 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,593.3 | 11,593.3 | 0.43641 | 0.53440 | 1.09065 | 11,764.6 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.92321 | 2.31228 | 25.1498 | 0.00000 | 0.00000 | 4.95313 | 4.95313 | 0.00000 | 1.15961 | 1.15961 | — | 4,878.06 | 4,878.06 | 0.14953 | 0.22380 | 7.62748 | 4,956.12 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.53349 | 0.42199 | 4.58985 | 0.00000 | 0.00000 | 0.90395 | 0.90395 | 0.00000 | 0.21163 | 0.21163 | — | 807.619 | 807.619 | 0.02476 | 0.03705 | 1.26282 | 820.542 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04494 | 0.33844 | 0.46834 | 0.00072 | 0.00643 | — | 0.00643 | 0.00592 | — | 0.00592 | — | 55.9152 | 55.9152 | 0.00227 | 0.00045 | — | 56.1070 |
| Architectural Coatings | 167.695 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00820 | 0.06177 | 0.08547 | 0.00013 | 0.00117 | — | 0.00117 | 0.00108 | — | 0.00108 | — | 9.25739 | 9.25739 | 0.00038 | 0.00008 | — | 9.28916 |
| Architectural Coatings | 30.6043 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.25790 | 4.61127 | 66.2892 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,296.6 | 12,296.6 | 0.69310 | 0.49473 | 42.1753 | 12,503.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.09921 | 6.01612 | 63.2093 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,593.3 | 11,593.3 | 0.43641 | 0.53440 | 1.09065 | 11,764.6 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.92321 | 2.31228 | 25.1498 | 0.00000 | 0.00000 | 4.95313 | 4.95313 | 0.00000 | 1.15961 | 1.15961 | — | 4,878.06 | 4,878.06 | 0.14953 | 0.22380 | 7.62748 | 4,956.12 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.53349 | 0.42199 | 4.58985 | 0.00000 | 0.00000 | 0.90395 | 0.90395 | 0.00000 | 0.21163 | 0.21163 | — | 807.619 | 807.619 | 0.02476 | 0.03705 | 1.26282 | 820.542 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.27. Architectural Coating (2029)

### 3.27.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07311 | 0.56725 | 0.79440 | 0.00123 | 0.00917 | — | 0.00917 | 0.00844 | — | 0.00844 | — | 95.3641 | 95.3641 | 0.00387 | 0.00077 | — | 95.6913 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01334 | 0.10352 | 0.14498 | 0.00022 | 0.00167 | — | 0.00167 | 0.00154 | — | 0.00154 | — | 15.7886 | 15.7886 | 0.00064 | 0.00013 | — | 15.8428 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.94051 | 4.15622 | 62.0350 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,078.8 | 12,078.8 | 0.31739 | 0.49473 | 38.5219 | 12,272.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.74215 | 5.56106 | 58.8547 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,389.4 | 11,389.4 | 0.39674 | 0.53440 | 0.99931 | 11,559.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.78748 | 3.61881 | 40.2237 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,173.57 | 8,173.57 | 0.25505 | 0.38172 | 11.8966 | 8,305.60 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.87372 | 0.66043 | 7.34083 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,353.23 | 1,353.23 | 0.04223 | 0.06320 | 1.96961 | 1,375.09 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07311 | 0.56725 | 0.79440 | 0.00123 | 0.00917 | — | 0.00917 | 0.00844 | — | 0.00844 | — | 95.3641 | 95.3641 | 0.00387 | 0.00077 | — | 95.6913 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01334 | 0.10352 | 0.14498 | 0.00022 | 0.00167 | — | 0.00167 | 0.00154 | — | 0.00154 | — | 15.7886 | 15.7886 | 0.00064 | 0.00013 | — | 15.8428 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.94051 | 4.15622 | 62.0350 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,078.8 | 12,078.8 | 0.31739 | 0.49473 | 38.5219 | 12,272.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.74215 | 5.56106 | 58.8547 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,389.4 | 11,389.4 | 0.39674 | 0.53440 | 0.99931 | 11,559.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.78748 | 3.61881 | 40.2237 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,173.57 | 8,173.57 | 0.25505 | 0.38172 | 11.8966 | 8,305.60 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.87372 | 0.66043 | 7.34083 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,353.23 | 1,353.23 | 0.04223 | 0.06320 | 1.96961 | 1,375.09 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.28. Architectural Coating (2030)

### 3.28.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07028 | 0.56052 | 0.79085 | 0.00123 | 0.00783 | — | 0.00783 | 0.00721 | — | 0.00721 | — | 95.3663 | 95.3663 | 0.00387 | 0.00077 | — | 95.6936 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01283 | 0.10229 | 0.14433 | 0.00022 | 0.00143 | — | 0.00143 | 0.00132 | — | 0.00132 | — | 15.7890 | 15.7890 | 0.00064 | 0.00013 | — | 15.8432 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.58345 | 3.74083 | 58.2358 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,871.8 | 11,871.8 | 0.27772 | 0.49473 | 35.0297 | 12,061.2 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 6.54378 | 5.10600 | 55.2912 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,195.4 | 11,195.4 | 0.39674 | 0.53440 | 0.90798 | 11,365.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.58911 | 3.29377 | 37.5517 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,034.50 | 8,034.50 | 0.22671 | 0.35338 | 10.8221 | 8,156.30 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.83751 | 0.60111 | 6.85319 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,330.20 | 1,330.20 | 0.03753 | 0.05851 | 1.79171 | 1,350.37 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07028 | 0.56052 | 0.79085 | 0.00123 | 0.00783 | — | 0.00783 | 0.00721 | — | 0.00721 | — | 95.3663 | 95.3663 | 0.00387 | 0.00077 | — | 95.6936 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01283 | 0.10229 | 0.14433 | 0.00022 | 0.00143 | — | 0.00143 | 0.00132 | — | 0.00132 | — | 15.7890 | 15.7890 | 0.00064 | 0.00013 | — | 15.8432 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.58345 | 3.74083 | 58.2358 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,871.8 | 11,871.8 | 0.27772 | 0.49473 | 35.0297 | 12,061.2 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 6.54378 | 5.10600 | 55.2912 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,195.4 | 11,195.4 | 0.39674 | 0.53440 | 0.90798 | 11,365.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.58911 | 3.29377 | 37.5517 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,034.50 | 8,034.50 | 0.22671 | 0.35338 | 10.8221 | 8,156.30 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.83751 | 0.60111 | 6.85319 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,330.20 | 1,330.20 | 0.03753 | 0.05851 | 1.79171 | 1,350.37 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.29. Architectural Coating (2031)

### 3.29.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05376 | 0.43786 | 0.62191 | 0.00097 | 0.00531 | — | 0.00531 | 0.00489 | — | 0.00489 | — | 75.2506 | 75.2506 | 0.00305 | 0.00061 | — | 75.5089 |
| Architectural Coatings | 225.683 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00981 | 0.07991 | 0.11350 | 0.00018 | 0.00097 | — | 0.00097 | 0.00089 | — | 0.00089 | — | 12.4586 | 12.4586 | 0.00051 | 0.00010 | — | 12.5014 |
| Architectural Coatings | 41.1871 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.30574 | 3.28577 | 54.3970 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,678.7 | 11,678.7 | 0.27772 | 0.49473 | 31.7524 | 11,864.8 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.18671 | 4.69062 | 51.3917 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,013.7 | 11,013.7 | 0.35706 | 0.53440 | 0.82202 | 11,182.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.44212 | 2.36481 | 27.7556 | 0.00000 | 0.00000 | 6.66589 | 6.66589 | 0.00000 | 1.56060 | 1.56060 | — | 6,236.75 | 6,236.75 | 0.17888 | 0.27883 | 7.72148 | 6,332.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.62819 | 0.43158 | 5.06540 | 0.00000 | 0.00000 | 1.21653 | 1.21653 | 0.00000 | 0.28481 | 0.28481 | — | 1,032.57 | 1,032.57 | 0.02962 | 0.04616 | 1.27838 | 1,048.34 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05376 | 0.43786 | 0.62191 | 0.00097 | 0.00531 | — | 0.00531 | 0.00489 | — | 0.00489 | — | 75.2506 | 75.2506 | 0.00305 | 0.00061 | — | 75.5089 |
| Architectural Coatings | 225.683 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00981 | 0.07991 | 0.11350 | 0.00018 | 0.00097 | — | 0.00097 | 0.00089 | — | 0.00089 | — | 12.4586 | 12.4586 | 0.00051 | 0.00010 | — | 12.5014 |
| Architectural Coatings | 41.1871 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.30574 | 3.28577 | 54.3970 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,678.7 | 11,678.7 | 0.27772 | 0.49473 | 31.7524 | 11,864.8 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.18671 | 4.69062 | 51.3917 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,013.7 | 11,013.7 | 0.35706 | 0.53440 | 0.82202 | 11,182.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.44212 | 2.36481 | 27.7556 | 0.00000 | 0.00000 | 6.66589 | 6.66589 | 0.00000 | 1.56060 | 1.56060 | — | 6,236.75 | 6,236.75 | 0.17888 | 0.27883 | 7.72148 | 6,332.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.62819 | 0.43158 | 5.06540 | 0.00000 | 0.00000 | 1.21653 | 1.21653 | 0.00000 | 0.28481 | 0.28481 | — | 1,032.57 | 1,032.57 | 0.02962 | 0.04616 | 1.27838 | 1,048.34 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 7,766.01 | 7,766.01 | 0.66251 | 0.08030 | — | 7,806.51 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 7,766.01 | 7,766.01 | 0.66251 | 0.08030 | — | 7,806.51 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Total | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Total | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 26,676.5 | 26,676.5 | 2.36086 | 0.05023 | — | 26,750.5 |
| Total | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 26,676.5 | 26,676.5 | 2.36086 | 0.05023 | — | 26,750.5 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 63.7151 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | — | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 51.7355 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 5.18203 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 7.96439 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | — | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 63.7151 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | — | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 51.7355 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 5.18203 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 7.96439 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | — | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/T | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Total | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/T | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Total | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Total | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Total | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/2/2023 | 1/26/2026 | 5.00000 | 800.000 | — |
| Site Preparation | Site Preparation | 1/27/2026 | 11/30/2027 | 5.00000 | 480.000 | — |

| | | | | | | |
|---|---|---|---|---|---|---|
| Grading | Grading | 12/1/2025 | 8/30/2030 | 5.00000 | 1,240.00 | — |
| Building Construction | Building Construction | 1/2/2023 | 12/31/2031 | 5.00000 | 2,348.00 | — |
| Paving | Paving | 6/1/2028 | 10/15/2031 | 5.00000 | 880.000 | — |
| Architectural Coating | Architectural Coating | 6/1/2028 | 10/15/2031 | 5.00000 | 880.000 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 99.7734 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 8,997.84 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 1,335.93 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 1,799.57 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 99.7734 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 8,997.84 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 1,335.93 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 1,799.57 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Apply dust suppressants to unpaved roads | 84% | 84% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 26,824,811 | 8,941,604 | 0.00000 | 0.00000 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Ton of Debris) | Material Exported (Ton of Debris) | Acres Graded (acres) | Material Demolished (Ton of Debris) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Site Preparation | 0.00000 | 0.00000 | 135.000 | 0.00000 | 0.00000 |
| Grading | 831,810 | 419,400 | 699.000 | 0.00000 | 0.00000 |
| Paving | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Condo/Townhouse | — | 0% |
| Paving | Condo/Townhouse | — | 0% |
| Paving | Condo/Townhouse | — | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2025 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2026 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2027 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2028 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2029 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2030 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2031 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2023 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2024 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 6,000 | 6,000 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 6,000 | 6,000 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 497 | 497 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 26,824,811 | 8,941,604 | 0.00000 | 0.00000 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 21,249,912 | 386.830 | 0.0330 | 0.0040 | 241,382,999 |
| Condo/Townhouse | 21,249,912 | 386.830 | 0.0330 | 0.0040 | 241,382,999 |
| Condo/Townhouse | 1,760,201 | 386.830 | 0.0330 | 0.0040 | 19,994,558 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 21,253,137 | 386.830 | 0.0330 | 0.0040 | 0.00000 |
| Condo/Townhouse | 21,253,137 | 386.830 | 0.0330 | 0.0040 | 0.00000 |
| Condo/Townhouse | 1,763,426 | 386.830 | 0.0330 | 0.0040 | 0.00000 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 20,778,129 | 0.00000 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 20,778,129 | 0.00000 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 367.501 | 0.00000 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 367.501 | 0.00000 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 6.75000 | annual days of extreme heat |
| Extreme Precipitation | 4.10000 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 31.3300 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |

| | | | | |
|---|---|---|---|---|
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 0 | 0 | 0 | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 1 | 1 | 1 | 2 |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 13.6154 |
| AQ-PM | 2.92470 |
| AQ-DPM | 26.3846 |
| Drinking Water | 38.7161 |
| Lead Risk Housing | 56.6982 |
| Pesticides | 0.00000 |
| Toxic Releases | 0.53763 |
| Traffic | 27.0500 |
| Effect Indicators | — |
| CleanUp Sites | 82.9787 |
| Groundwater | 87.4813 |
| Haz Waste Facilities/Generators | 30.5890 |
| Impaired Water Bodies | 77.2995 |
| Solid Waste | 59.1753 |
| Sensitive Population | — |
| Asthma | 35.8549 |
| Cardio-vascular | 13.0982 |
| Low Birth Weights | 19.9256 |
| Socioeconomic Factor Indicators | — |
| Education | 24.1205 |
| Housing | 63.9670 |
| Linguistic | 24.7665 |
| Poverty | 26.6709 |
| Unemployment | 37.7147 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 64.9557295 |
| Employed | 60.78532016 |
| Median HI | 46.47760811 |
| Education | — |
| Bachelor's or higher | 81.58603875 |
| High school enrollment | 100 |
| Preschool enrollment | 1.873476197 |
| Transportation | — |
| Auto Access | 57.21801617 |
| Active commuting | 87.89939689 |
| Social | — |
| 2-parent households | 65.78981137 |
| Voting | 70.98678301 |
| Neighborhood | — |
| Alcohol availability | 40.65186706 |
| Park access | 81.35506224 |
| Retail density | 93.41716925 |
| Supermarket access | 64.09598358 |
| Tree canopy | 81.52187861 |
| Housing | — |
| Homeownership | 12.72937251 |
| Housing habitability | 27.37071731 |
| Low-inc homeowner severe housing cost burden | 19.88964455 |
| Low-inc renter severe housing cost burden | 39.67663288 |

| | |
|---|---|
| Uncrowded housing | 84.29359682 |
| Health Outcomes | — |
| Insured adults | 64.90440139 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 75.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 79.6 |
| Cognitively Disabled | 32.0 |
| Physically  Disabled | 36.0 |
| Heart Attack ER Admissions | 94.8 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 84.3 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 4.5 |
| SLR Inundation Area | 47.2 |

| | |
|---|---|
| Children | 88.7 |
| Elderly | 20.2 |
| English Speaking | 64.4 |
| Foreign-born | 44.0 |
| Outdoor Workers | 70.9 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 31.0 |
| Traffic Density | 1.4 |
| Traffic Access | 0.0 |
| Other Indices | — |
| Hardship | 20.0 |
| Other Decision Support | — |
| 2016 Voting | 74.8 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0000 |
| Healthy Places Index Score for Project Location (b) | 67.0000 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | 3CE serves Monterey County for electricity |
| Construction: Construction Phases | Revised to fit in planning years of 2023-2031 |
| Construction: Dust From Material Movement | Based on CalEEMod suggested estimates |
| Construction: On-Road Fugitive Dust | Site are located adjacent to existing roadways and development. Accessible primarily from paved roads. |
| Operations: Vehicle Data | Mobile emissions calculated separately |

## 8.2. Project Characteristics

### 8.2.1. Project Details

| Model Parameter | Default Value | New Value |
|---|---|---|
| Electric Utility | Pacific Gas & Electric Company | Central Coast Community Energy |

## 8.4. Construction

### 8.4.1. Construction Phases

| Phase Type | Phase Name | Model Parameter | Default Value | New Value |
|---|---|---|---|---|
| Grading | Grading | Start Date | 12/1/2027 | 12/1/2025 |
| Grading | Grading | End Date | 9/1/2032 | 8/30/2030 |
| Building Construction | Building Construction | Start Date | 9/2/2032 | 1/2/2023 |
| Building Construction | Building Construction | End Date | 3/14/2080 | 12/31/2031 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Building Construction | Work Days per Phase | 12,400.0 | 2,348.00 |
| Paving | Paving | Start Date | 3/15/2080 | 6/1/2028 |
| Paving | Paving | End Date | 7/30/2083 | 10/15/2031 |
| Architectural Coating | Architectural Coating | Start Date | 7/31/2083 | 6/1/2028 |
| Architectural Coating | Architectural Coating | End Date | 12/14/2086 | 10/15/2031 |

## 8.4.4. Dust from Material Movement

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Site Preparation | Material Imported | Ton of Debris | — | 0.00000 |
| Site Preparation | Material Exported | Ton of Debris | — | 0.00000 |
| Site Preparation | Total Acres Graded | acres | 720.000 | 135.000 |
| Grading | Material Imported | Ton of Debris | — | 831,810 |
| Grading | Material Exported | Ton of Debris | — | 419,400 |
| Grading | Total Acres Graded | acres | 3,720.00 | 699.000 |

## 8.4.7. On-Road Fugitive Dust

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Demolition | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Vendor Trip Paved | % | 52.0000 | 100.0000 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Hauling Trip Paved | % | 52.0000 | 100.0000 |

## 8.5. Operations

### 8.5.1. Mobile Sources

#### 8.5.1.1. Vehicle Data

| Land Use | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |

# Monterey HEU - Reasonable Capacity Detailed Report

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3.1.2. Offsite - Unmitigated

3.1.3. Onsite - Mitigated

3.1.4. Offsite - Mitigated

3.2. Demolition (2024)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.2.3. Onsite - Mitigated

3.2.4. Offsite - Mitigated

3.3. Site Preparation (2024)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.3.3. Onsite - Mitigated

3.3.4. Offsite - Mitigated

3.4. Grading (2024)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.4.3. Onsite - Mitigated

3.4.4. Offsite - Mitigated

3.5. Grading (2025)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.5.3. Onsite - Mitigated

3.5.4. Offsite - Mitigated

3.6. Grading (2026)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.6.3. Onsite - Mitigated

3.6.4. Offsite - Mitigated

3.7. Building Construction (2023)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

3.7.3. Onsite - Mitigated

3.7.4. Offsite - Mitigated

3.8. Building Construction (2024)

3.8.1. Onsite - Unmitigated

3.8.2. Offsite - Unmitigated

3.8.3. Onsite - Mitigated

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3.9. Building Construction (2025)

3.9.1. Onsite - Unmitigated

3.9.2. Offsite - Unmitigated

3.9.3. Onsite - Mitigated

3.9.4. Offsite - Mitigated

3.10. Building Construction (2026)

3.10.1. Onsite - Unmitigated

3.10.2. Offsite - Unmitigated

3.10.3. Onsite - Mitigated

3.10.4. Offsite - Mitigated

3.11. Building Construction (2027)

3.11.1. Onsite - Unmitigated

3.11.2. Offsite - Unmitigated

3.11.3. Onsite - Mitigated

3.11.4. Offsite - Mitigated

3.12. Building Construction (2028)

3.12.1. Onsite - Unmitigated

3.12.2. Offsite - Unmitigated

3.12.3. Onsite - Mitigated

3.12.4. Offsite - Mitigated

3.13. Building Construction (2029)

3.13.1. Onsite - Unmitigated

3.13.2. Offsite - Unmitigated

3.13.3. Onsite - Mitigated

3.13.4. Offsite - Mitigated

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3.14.1. Onsite - Unmitigated

3.14.2. Offsite - Unmitigated

3.14.3. Onsite - Mitigated

3.14.4. Offsite - Mitigated

3.15. Building Construction (2031)

3.15.1. Onsite - Unmitigated

3.15.2. Offsite - Unmitigated

3.15.3. Onsite - Mitigated

3.15.4. Offsite - Mitigated

3.16. Paving (2028)

3.16.1. Onsite - Unmitigated

3.16.2. Offsite - Unmitigated

3.16.3. Onsite - Mitigated

3.16.4. Offsite - Mitigated

3.17. Paving (2029)

3.17.1. Onsite - Unmitigated

3.17.2. Offsite - Unmitigated

3.17.3. Onsite - Mitigated

3.17.4. Offsite - Mitigated

3.18. Architectural Coating (2029)

3.18.1. Onsite - Unmitigated

3.18.2. Offsite - Unmitigated

3.18.3. Onsite - Mitigated

3.18.4. Offsite - Mitigated

3.19. Architectural Coating (2030)

3.19.1. Onsite - Unmitigated

3.19.2. Offsite - Unmitigated

3.19.3. Onsite - Mitigated

3.19.4. Offsite - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.2. Project Characteristics

8.2.1. Project Details

8.4. Construction

8.4.1. Construction Phases

8.4.4. Dust from Material Movement

8.4.7. On-Road Fugitive Dust

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Monterey HEU - Reasonable Capacity |
| Construction Start Date | 1/2/2023 |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.80000 |
| Precipitation (days) | 27.6000 |
| Location | Monterey County, CA, USA |
| County | Monterey |
| City | Monterey |
| Air District | Monterey Bay ARD |
| Air Basin | North Central Coast |
| TAZ | 3238 |
| EDFZ | 6 |
| Electric Utility | Central Coast Community Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.43 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 4,434.00 | Dwelling Unit | 277.125 | 4,700,040 | 0.00000 | 0.00000 | 14,721.0 | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Energy | E-15 | Require All-Electric Development |

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 395.064 | 75.0020 | 213.388 | 0.20144 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 394.610 | 87.1156 | 204.653 | 0.20144 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 279.884 | 55.4064 | 140.435 | 0.14389 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 51.0789 | 10.1117 | 25.6293 | 0.02626 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |

## 2.2. Construction Emissions by Year

### 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.9523 | 67.0310 | 213.388 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 39,563.9 | 39,563.9 | 2.12414 | 2.40659 | 135.591 | 40,469.8 |
| 2024 | 21.3236 | 72.9881 | 210.159 | 0.13528 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 40,865.6 | 40,865.6 | 2.10949 | 2.42252 | 128.011 | 41,768.3 |
| 2025 | 20.2076 | 75.0020 | 197.712 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| 2026 | 19.3510 | 70.2130 | 186.424 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 49,134.1 | 49,134.1 | 2.54856 | 3.68984 | 127.120 | 50,424.5 |
| 2027 | 14.6239 | 30.8731 | 144.751 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 33,586.2 | 33,586.2 | 1.67291 | 2.17794 | 100.950 | 34,378.0 |
| 2028 | 14.9688 | 35.7516 | 146.640 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 34,571.7 | 34,571.7 | 1.74000 | 2.18388 | 92.5624 | 35,358.5 |
| 2029 | 395.064 | 33.8927 | 151.426 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 36,744.9 | 36,744.9 | 1.11396 | 2.28110 | 97.4150 | 37,549.9 |
| 2030 | 394.265 | 28.1341 | 143.096 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 36,043.8 | 36,043.8 | 0.96649 | 2.28110 | 88.0884 | 36,835.8 |
| 2031 | 12.3874 | 24.4902 | 114.256 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 31,090.3 | 31,090.3 | 0.86254 | 2.04147 | 68.0435 | 31,788.3 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.0287 | 71.2559 | 204.653 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 38,175.3 | 38,175.3 | 2.32583 | 2.47731 | 3.50986 | 38,975.1 |
| 2024 | 21.0076 | 87.1156 | 203.645 | 0.20143 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| 2025 | 19.9743 | 79.6512 | 190.584 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 48,593.0 | 48,593.0 | 2.88599 | 3.69242 | 3.57123 | 49,769.1 |
| 2026 | 19.0261 | 74.0742 | 179.625 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 47,840.2 | 47,840.2 | 2.75058 | 3.69242 | 3.29341 | 49,012.6 |
| 2027 | 14.3110 | 34.0994 | 138.289 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 32,323.0 | 32,323.0 | 1.88406 | 2.24833 | 2.62414 | 33,042.7 |
| 2028 | 14.6651 | 38.9265 | 141.350 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 33,328.1 | 33,328.1 | 1.28248 | 2.26504 | 2.39537 | 34,037.5 |
| 2029 | 394.610 | 37.0255 | 144.843 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 35,287.4 | 35,287.4 | 1.28287 | 2.37600 | 2.52654 | 36,030.0 |
| 2030 | 394.159 | 31.6692 | 137.005 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 34,614.3 | 34,614.3 | 1.21986 | 2.36555 | 2.28435 | 35,352.0 |
| 2031 | 12.1553 | 27.6217 | 109.103 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 29,921.5 | 29,921.5 | 1.00330 | 2.11185 | 1.76284 | 30,577.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 15.2698 | 49.9075 | 140.435 | 0.08470 | 1.33845 | 16.6986 | 18.0371 | 1.23856 | 3.98103 | 5.21959 | — | 27,265.4 | 27,265.4 | 1.61383 | 1.71429 | 41.6803 | 27,858.3 |
| 2024 | 14.7869 | 54.0800 | 138.210 | 0.10222 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 29,225.5 | 29,225.5 | 1.67283 | 1.88496 | 40.3527 | 29,869.4 |
| 2025 | 14.0762 | 55.4064 | 131.127 | 0.14389 | 1.39101 | 20.8618 | 22.2528 | 1.29576 | 5.43984 | 6.73560 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 12.5877 | 42.0021 | 115.649 | 0.11372 | 0.93728 | 19.3244 | 20.2617 | 0.87509 | 4.90224 | 5.77733 | — | 30,324.7 | 30,324.7 | 1.72945 | 2.27412 | 37.3100 | 31,082.9 |
| 2027 | 10.1793 | 23.5427 | 94.9221 | 0.06172 | 0.33043 | 16.6741 | 17.0045 | 0.31119 | 3.97548 | 4.28668 | — | 23,154.2 | 23,154.2 | 1.29548 | 1.60595 | 31.1588 | 23,696.3 |
| 2028 | 10.1149 | 24.8677 | 93.7076 | 0.06730 | 0.40432 | 16.7579 | 17.1623 | 0.37920 | 3.99532 | 4.37451 | — | 23,408.1 | 23,408.1 | 0.79614 | 1.61682 | 28.5838 | 23,938.4 |
| 2029 | 84.4330 | 24.8448 | 93.9562 | 0.06926 | 0.41292 | 17.5462 | 17.9591 | 0.38708 | 4.17967 | 4.56675 | — | 23,937.5 | 23,937.5 | 0.82070 | 1.59942 | 27.0829 | 24,461.8 |
| 2030 | 279.884 | 21.6720 | 93.5820 | 0.06295 | 0.28361 | 19.6551 | 19.9387 | 0.26812 | 4.67338 | 4.94150 | — | 24,784.4 | 24,784.4 | 0.75021 | 1.62866 | 27.1944 | 25,315.7 |
| 2031 | 8.58930 | 18.9084 | 75.1455 | 0.06172 | 0.26375 | 16.6741 | 16.9378 | 0.20485 | 3.97548 | 4.18033 | — | 21,434.2 | 21,434.2 | 0.66637 | 1.45819 | 20.9840 | 21,906.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.78674 | 9.10811 | 25.6293 | 0.01546 | 0.24427 | 3.04750 | 3.29176 | 0.22604 | 0.72654 | 0.95257 | — | 4,514.10 | 4,514.10 | 0.26719 | 0.28382 | 6.90065 | 4,612.26 |
| 2024 | 2.69861 | 9.86960 | 25.2233 | 0.01866 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 4,838.62 | 4,838.62 | 0.27696 | 0.31208 | 6.68085 | 4,945.23 |
| 2025 | 2.56890 | 10.1117 | 23.9307 | 0.02626 | 0.25386 | 3.80728 | 4.06114 | 0.23648 | 0.99277 | 1.22925 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |
| 2026 | 2.29725 | 7.66538 | 21.1059 | 0.02075 | 0.17105 | 3.52670 | 3.69776 | 0.15970 | 0.89466 | 1.05436 | — | 5,020.60 | 5,020.60 | 0.28633 | 0.37651 | 6.17710 | 5,146.13 |
| 2027 | 1.85773 | 4.29655 | 17.3233 | 0.01126 | 0.06030 | 3.04302 | 3.10332 | 0.05679 | 0.72553 | 0.78232 | — | 3,833.45 | 3,833.45 | 0.21448 | 0.26588 | 5.15869 | 3,923.20 |
| 2028 | 1.84596 | 4.53835 | 17.1016 | 0.01228 | 0.07379 | 3.05832 | 3.13211 | 0.06920 | 0.72915 | 0.79835 | — | 3,875.48 | 3,875.48 | 0.13181 | 0.26768 | 4.73237 | 3,963.27 |
| 2029 | 15.4090 | 4.53418 | 17.1470 | 0.01264 | 0.07536 | 3.20218 | 3.27754 | 0.07064 | 0.76279 | 0.83343 | — | 3,963.13 | 3,963.13 | 0.13588 | 0.26480 | 4.48389 | 4,049.93 |
| 2030 | 51.0789 | 3.95515 | 17.0787 | 0.01149 | 0.05176 | 3.58705 | 3.63881 | 0.04893 | 0.85289 | 0.90182 | — | 4,103.34 | 4,103.34 | 0.12421 | 0.26964 | 4.50234 | 4,191.30 |
| 2031 | 1.56755 | 3.45078 | 13.7141 | 0.01126 | 0.04814 | 3.04302 | 3.09115 | 0.03738 | 0.72553 | 0.76291 | — | 3,548.67 | 3,548.67 | 0.11033 | 0.24142 | 3.47415 | 3,626.85 |

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.07227 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 7,693.37 | 7,693.37 | 0.31208 | 0.06242 | 0.00000 | 7,719.77 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.08431 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 3.33632 | 32.3010 | 31.3632 | 0.05116 | 1.42237 | 4.18014 | 5.60251 | 1.30858 | 2.10009 | 3.40867 | — | 5,434.04 | 5,434.04 | 0.22043 | 0.04409 | 0.00000 | 5,452.69 |
| 2025 | 3.08834 | 28.6589 | 29.5358 | 0.06024 | 1.19058 | 2.60408 | 3.79466 | 1.09534 | 1.02392 | 2.11926 | — | 6,426.10 | 6,426.10 | 0.26067 | 0.05213 | 0.00000 | 6,448.15 |
| 2026 | 2.14106 | 19.3459 | 21.7251 | 0.04426 | 0.77739 | 1.64806 | 2.42545 | 0.71520 | 0.64802 | 1.36322 | — | 4,695.23 | 4,695.23 | 0.19046 | 0.03809 | 0.00000 | 4,711.35 |
| 2027 | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | 0.00000 | 0.24041 | 0.22118 | 0.00000 | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | 0.00000 | 1,718.07 |
| 2028 | 0.97562 | 8.96044 | 13.1046 | 0.02217 | 0.31406 | 0.00000 | 0.31406 | 0.28893 | 0.00000 | 0.28893 | — | 2,302.65 | 2,302.65 | 0.09341 | 0.01868 | 0.00000 | 2,310.55 |
| 2029 | 75.1989 | 9.62168 | 14.5570 | 0.02426 | 0.32290 | 0.00000 | 0.32290 | 0.29707 | 0.00000 | 0.29707 | — | 2,518.59 | 2,518.59 | 0.10217 | 0.02043 | 0.00000 | 2,527.23 |
| 2030 | 269.877 | 6.55171 | 9.98991 | 0.01794 | 0.19359 | 0.00000 | 0.19359 | 0.17810 | 0.00000 | 0.17810 | — | 1,806.87 | 1,806.87 | 0.07329 | 0.01466 | 0.00000 | 1,813.07 |
| 2031 | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | 0.00000 | 0.17374 | 0.15984 | 0.00000 | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | 0.00000 | 1,717.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.60888 | 5.89493 | 5.72379 | 0.00934 | 0.25958 | 0.76288 | 1.02246 | 0.23882 | 0.38327 | 0.62208 | — | 899.668 | 899.668 | 0.03649 | 0.00730 | 0.00000 | 902.755 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 0.56362 | 5.23025 | 5.39028 | 0.01099 | 0.21728 | 0.47524 | 0.69253 | 0.19990 | 0.18687 | 0.38676 | — | 1,063.91 | 1,063.91 | 0.04316 | 0.00863 | 0.00000 | 1,067.57 |
| 2026 | 0.39074 | 3.53062 | 3.96484 | 0.00808 | 0.14187 | 0.30077 | 0.44264 | 0.13052 | 0.11826 | 0.24879 | — | 777.349 | 777.349 | 0.03153 | 0.00631 | 0.00000 | 780.017 |
| 2027 | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | 0.00000 | 0.04387 | 0.04036 | 0.00000 | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | 0.00000 | 284.447 |
| 2028 | 0.17805 | 1.63528 | 2.39159 | 0.00405 | 0.05732 | 0.00000 | 0.05732 | 0.05273 | 0.00000 | 0.05273 | — | 381.230 | 381.230 | 0.01546 | 0.00309 | 0.00000 | 382.538 |
| 2029 | 13.7238 | 1.75596 | 2.65665 | 0.00443 | 0.05893 | 0.00000 | 0.05893 | 0.05421 | 0.00000 | 0.05421 | — | 416.981 | 416.981 | 0.01691 | 0.00338 | 0.00000 | 418.412 |
| 2030 | 49.2525 | 1.19569 | 1.82316 | 0.00327 | 0.03533 | 0.00000 | 0.03533 | 0.03250 | 0.00000 | 0.03250 | — | 299.148 | 299.148 | 0.01213 | 0.00243 | 0.00000 | 300.174 |
| 2031 | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | 0.00000 | 0.03171 | 0.02917 | 0.00000 | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | 0.00000 | 284.418 |

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 17.8504 | 27.8740 | 176.729 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 33,741.4 | 33,741.4 | 1.88795 | 2.35936 | 135.591 | 34,627.3 |
| 2024 | 16.4755 | 25.8142 | 164.118 | 0.06301 | 0.12602 | 23.8752 | 24.0012 | 0.12602 | 5.69672 | 5.82274 | — | 33,172.3 | 33,172.3 | 1.79741 | 2.36010 | 128.011 | 34,048.5 |
| 2025 | 15.8839 | 34.8796 | 156.362 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,920.1 | 40,920.1 | 2.23776 | 3.61944 | 137.406 | 42,192.0 |
| 2026 | 15.2360 | 33.1337 | 145.887 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,138.3 | 40,138.3 | 2.18365 | 3.61686 | 127.120 | 41,397.9 |
| 2027 | 13.5940 | 21.4822 | 131.813 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 31,189.1 | 31,189.1 | 1.57567 | 2.15850 | 100.950 | 31,972.7 |
| 2028 | 13.2921 | 20.1991 | 123.795 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 30,663.2 | 30,663.2 | 1.58145 | 2.15217 | 92.5624 | 31,436.6 |
| 2029 | 15.1311 | 20.2929 | 137.412 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 34,214.5 | 34,214.5 | 1.01132 | 2.26057 | 97.4150 | 35,010.9 |
| 2030 | 14.3605 | 18.9574 | 129.104 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 33,513.4 | 33,513.4 | 0.86385 | 2.26057 | 88.0884 | 34,296.8 |
| 2031 | 11.4690 | 16.3716 | 101.411 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 28,693.5 | 28,693.5 | 0.76531 | 2.02202 | 68.0435 | 29,383.2 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 16.9268 | 32.0989 | 167.993 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 32,352.7 | 32,352.7 | 2.08964 | 2.43007 | 3.50986 | 33,132.6 |
| 2024 | 16.2881 | 41.6078 | 160.355 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,351.9 | 40,351.9 | 2.60490 | 3.73397 | 3.77017 | 41,533.5 |
| 2025 | 15.6507 | 39.5287 | 149.234 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 39,596.5 | 39,596.5 | 2.52105 | 3.61944 | 3.57123 | 40,741.7 |
| 2026 | 14.9111 | 36.9950 | 139.088 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 38,844.4 | 38,844.4 | 2.38567 | 3.61944 | 3.29341 | 39,985.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 13.2811 | 24.7084 | 125.351 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 29,925.9 | 29,925.9 | 1.78682 | 2.22888 | 2.62414 | 30,637.4 |
| 2028 | 12.9884 | 23.3740 | 118.504 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 29,419.6 | 29,419.6 | 1.12394 | 2.23333 | 2.39537 | 30,115.6 |
| 2029 | 14.6775 | 23.9125 | 130.830 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,757.0 | 32,757.0 | 1.18023 | 2.35548 | 2.52654 | 33,491.0 |
| 2030 | 14.2552 | 22.4925 | 123.013 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,083.9 | 32,083.9 | 1.11722 | 2.34503 | 2.28435 | 32,812.9 |
| 2031 | 11.2369 | 19.5032 | 96.2573 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 27,524.7 | 27,524.7 | 0.90607 | 2.09240 | 1.76284 | 28,172.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 12.3478 | 22.0148 | 114.321 | 0.04489 | 0.08977 | 16.6986 | 16.7884 | 0.08977 | 3.98103 | 4.07080 | — | 23,117.8 | 23,117.8 | 1.44558 | 1.68064 | 41.6803 | 23,696.5 |
| 2024 | 11.4506 | 21.7790 | 106.847 | 0.05106 | 0.10720 | 17.0304 | 17.1376 | 0.10720 | 4.06980 | 4.17700 | — | 23,791.5 | 23,791.5 | 1.45241 | 1.84087 | 40.3527 | 24,416.7 |
| 2025 | 10.9878 | 26.7475 | 101.591 | 0.08365 | 0.20043 | 18.2577 | 18.4582 | 0.20043 | 4.41592 | 4.61634 | — | 28,351.0 | 28,351.0 | 1.69957 | 2.58531 | 42.5093 | 29,206.4 |
| 2026 | 10.4466 | 22.6562 | 93.9237 | 0.06947 | 0.15989 | 17.6763 | 17.8362 | 0.15989 | 4.25422 | 4.41412 | — | 25,629.4 | 25,629.4 | 1.53899 | 2.23602 | 37.3100 | 26,371.6 |
| 2027 | 9.44370 | 16.8349 | 85.6808 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.09002 | 3.97548 | 4.06550 | — | 21,442.0 | 21,442.0 | 1.22603 | 1.59206 | 31.1588 | 21,978.3 |
| 2028 | 9.13924 | 15.9072 | 80.6030 | 0.04513 | 0.09026 | 16.7579 | 16.8482 | 0.09026 | 3.99532 | 4.08558 | — | 21,105.4 | 21,105.4 | 0.70274 | 1.59814 | 28.5838 | 21,627.8 |
| 2029 | 9.23412 | 15.2231 | 79.3992 | 0.04501 | 0.09002 | 17.5462 | 17.6362 | 0.09002 | 4.17967 | 4.26968 | — | 21,419.0 | 21,419.0 | 0.71853 | 1.57899 | 27.0829 | 21,934.5 |
| 2030 | 10.0073 | 15.1203 | 83.5921 | 0.04501 | 0.09002 | 19.6551 | 19.7451 | 0.09002 | 4.67338 | 4.76340 | — | 22,977.5 | 22,977.5 | 0.67692 | 1.61400 | 27.1944 | 23,502.6 |
| 2031 | 7.93331 | 13.1094 | 65.9703 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.04501 | 3.97548 | 4.02049 | — | 19,722.1 | 19,722.1 | 0.59692 | 1.44430 | 20.9840 | 20,188.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.25348 | 4.01770 | 20.8635 | 0.00819 | 0.01638 | 3.04750 | 3.06388 | 0.01638 | 0.72654 | 0.74292 | — | 3,827.42 | 3,827.42 | 0.23933 | 0.27825 | 6.90065 | 3,923.22 |
| 2024 | 2.08973 | 3.97467 | 19.4995 | 0.00932 | 0.01956 | 3.10805 | 3.12762 | 0.01956 | 0.74274 | 0.76230 | — | 3,938.96 | 3,938.96 | 0.24046 | 0.30478 | 6.68085 | 4,042.47 |
| 2025 | 2.00528 | 4.88142 | 18.5404 | 0.01527 | 0.03658 | 3.33204 | 3.36862 | 0.03658 | 0.80590 | 0.84248 | — | 4,693.83 | 4,693.83 | 0.28138 | 0.42803 | 7.03790 | 4,835.46 |
| 2026 | 1.90650 | 4.13475 | 17.1411 | 0.01268 | 0.02918 | 3.22593 | 3.25511 | 0.02918 | 0.77640 | 0.80558 | — | 4,243.25 | 4,243.25 | 0.25480 | 0.37020 | 6.17710 | 4,366.11 |
| 2027 | 1.72348 | 3.07237 | 15.6367 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.01643 | 0.72553 | 0.74195 | — | 3,549.97 | 3,549.97 | 0.20298 | 0.26358 | 5.15869 | 3,638.75 |
| 2028 | 1.66791 | 2.90307 | 14.7100 | 0.00824 | 0.01647 | 3.05832 | 3.07480 | 0.01647 | 0.72915 | 0.74562 | — | 3,494.25 | 3,494.25 | 0.11635 | 0.26459 | 4.73237 | 3,580.73 |
| 2029 | 1.68523 | 2.77822 | 14.4904 | 0.00821 | 0.01643 | 3.20218 | 3.21861 | 0.01643 | 0.76279 | 0.77922 | — | 3,546.15 | 3,546.15 | 0.11896 | 0.26142 | 4.48389 | 3,631.51 |
| 2030 | 1.82633 | 2.75946 | 15.2556 | 0.00821 | 0.01643 | 3.58705 | 3.60348 | 0.01643 | 0.85289 | 0.86932 | — | 3,804.19 | 3,804.19 | 0.11207 | 0.26722 | 4.50234 | 3,891.13 |
| 2031 | 1.44783 | 2.39247 | 12.0396 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.00821 | 0.72553 | 0.73374 | — | 3,265.23 | 3,265.23 | 0.09883 | 0.23912 | 3.47415 | 3,342.43 |

## 2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.9523 | 67.0310 | 213.388 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 39,563.9 | 39,563.9 | 2.12414 | 2.40659 | 135.591 | 40,469.8 |
| 2024 | 21.3236 | 72.9881 | 210.159 | 0.13528 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 40,865.6 | 40,865.6 | 2.10949 | 2.42252 | 128.011 | 41,768.3 |
| 2025 | 20.2076 | 75.0020 | 197.712 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| 2026 | 19.3510 | 70.2130 | 186.424 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 49,134.1 | 49,134.1 | 2.54856 | 3.68984 | 127.120 | 50,424.5 |
| 2027 | 14.6239 | 30.8731 | 144.751 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 33,586.2 | 33,586.2 | 1.67291 | 2.17794 | 100.950 | 34,378.0 |
| 2028 | 14.9688 | 35.7516 | 146.640 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 34,571.7 | 34,571.7 | 1.74000 | 2.18388 | 92.5624 | 35,358.5 |
| 2029 | 395.064 | 33.8927 | 151.426 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 36,744.9 | 36,744.9 | 1.11396 | 2.28110 | 97.4150 | 37,549.9 |
| 2030 | 394.265 | 28.1341 | 143.096 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 36,043.8 | 36,043.8 | 0.96649 | 2.28110 | 88.0884 | 36,835.8 |
| 2031 | 12.3874 | 24.4902 | 114.256 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 31,090.3 | 31,090.3 | 0.86254 | 2.04147 | 68.0435 | 31,788.3 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.0287 | 71.2559 | 204.653 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 38,175.3 | 38,175.3 | 2.32583 | 2.47731 | 3.50986 | 38,975.1 |
| 2024 | 21.0076 | 87.1156 | 203.645 | 0.20143 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| 2025 | 19.9743 | 79.6512 | 190.584 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 48,593.0 | 48,593.0 | 2.88599 | 3.69242 | 3.57123 | 49,769.1 |
| 2026 | 19.0261 | 74.0742 | 179.625 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 47,840.2 | 47,840.2 | 2.75058 | 3.69242 | 3.29341 | 49,012.6 |
| 2027 | 14.3110 | 34.0994 | 138.289 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 32,323.0 | 32,323.0 | 1.88406 | 2.24833 | 2.62414 | 33,042.7 |
| 2028 | 14.6651 | 38.9265 | 141.350 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 33,328.1 | 33,328.1 | 1.28248 | 2.26504 | 2.39537 | 34,037.5 |
| 2029 | 394.610 | 37.0255 | 144.843 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 35,287.4 | 35,287.4 | 1.28287 | 2.37600 | 2.52654 | 36,030.0 |
| 2030 | 394.159 | 31.6692 | 137.005 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 34,614.3 | 34,614.3 | 1.21986 | 2.36555 | 2.28435 | 35,352.0 |
| 2031 | 12.1553 | 27.6217 | 109.103 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 29,921.5 | 29,921.5 | 1.00330 | 2.11185 | 1.76284 | 30,577.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 15.2698 | 49.9075 | 140.435 | 0.08470 | 1.33845 | 16.6986 | 18.0371 | 1.23856 | 3.98103 | 5.21959 | — | 27,265.4 | 27,265.4 | 1.61383 | 1.71429 | 41.6803 | 27,858.3 |
| 2024 | 14.7869 | 54.0800 | 138.210 | 0.10222 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 29,225.5 | 29,225.5 | 1.67283 | 1.88496 | 40.3527 | 29,869.4 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 14.0762 | 55.4064 | 131.127 | 0.14389 | 1.39101 | 20.8618 | 22.2528 | 1.29576 | 5.43984 | 6.73560 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |
| 2026 | 12.5877 | 42.0021 | 115.649 | 0.11372 | 0.93728 | 19.3244 | 20.2617 | 0.87509 | 4.90224 | 5.77733 | — | 30,324.7 | 30,324.7 | 1.72945 | 2.27412 | 37.3100 | 31,082.9 |
| 2027 | 10.1793 | 23.5427 | 94.9221 | 0.06172 | 0.33043 | 16.6741 | 17.0045 | 0.31119 | 3.97548 | 4.28668 | — | 23,154.2 | 23,154.2 | 1.29548 | 1.60595 | 31.1588 | 23,696.3 |
| 2028 | 10.1149 | 24.8677 | 93.7076 | 0.06730 | 0.40432 | 16.7579 | 17.1623 | 0.37920 | 3.99532 | 4.37451 | — | 23,408.1 | 23,408.1 | 0.79614 | 1.61682 | 28.5838 | 23,938.4 |
| 2029 | 84.4330 | 24.8448 | 93.9562 | 0.06926 | 0.41292 | 17.5462 | 17.9591 | 0.38708 | 4.17967 | 4.56675 | — | 23,937.5 | 23,937.5 | 0.82070 | 1.59942 | 27.0829 | 24,461.8 |
| 2030 | 279.884 | 21.6720 | 93.5820 | 0.06295 | 0.28361 | 19.6551 | 19.9387 | 0.26812 | 4.67338 | 4.94150 | — | 24,784.4 | 24,784.4 | 0.75021 | 1.62866 | 27.1944 | 25,315.7 |
| 2031 | 8.58930 | 18.9084 | 75.1455 | 0.06172 | 0.26375 | 16.6741 | 16.9378 | 0.20485 | 3.97548 | 4.18033 | — | 21,434.2 | 21,434.2 | 0.66637 | 1.45819 | 20.9840 | 21,906.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.78674 | 9.10811 | 25.6293 | 0.01546 | 0.24427 | 3.04750 | 3.29176 | 0.22604 | 0.72654 | 0.95257 | — | 4,514.10 | 4,514.10 | 0.26719 | 0.28382 | 6.90065 | 4,612.26 |
| 2024 | 2.69861 | 9.86960 | 25.2233 | 0.01866 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 4,838.62 | 4,838.62 | 0.27696 | 0.31208 | 6.68085 | 4,945.23 |
| 2025 | 2.56890 | 10.1117 | 23.9307 | 0.02626 | 0.25386 | 3.80728 | 4.06114 | 0.23648 | 0.99277 | 1.22925 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |
| 2026 | 2.29725 | 7.66538 | 21.1059 | 0.02075 | 0.17105 | 3.52670 | 3.69776 | 0.15970 | 0.89466 | 1.05436 | — | 5,020.60 | 5,020.60 | 0.28633 | 0.37651 | 6.17710 | 5,146.13 |
| 2027 | 1.85773 | 4.29655 | 17.3233 | 0.01126 | 0.06030 | 3.04302 | 3.10332 | 0.05679 | 0.72553 | 0.78232 | — | 3,833.45 | 3,833.45 | 0.21448 | 0.26588 | 5.15869 | 3,923.20 |
| 2028 | 1.84596 | 4.53835 | 17.1016 | 0.01228 | 0.07379 | 3.05832 | 3.13211 | 0.06920 | 0.72915 | 0.79835 | — | 3,875.48 | 3,875.48 | 0.13181 | 0.26768 | 4.73237 | 3,963.27 |
| 2029 | 15.4090 | 4.53418 | 17.1470 | 0.01264 | 0.07536 | 3.20218 | 3.27754 | 0.07064 | 0.76279 | 0.83343 | — | 3,963.13 | 3,963.13 | 0.13588 | 0.26480 | 4.48389 | 4,049.93 |
| 2030 | 51.0789 | 3.95515 | 17.0787 | 0.01149 | 0.05176 | 3.58705 | 3.63881 | 0.04893 | 0.85289 | 0.90182 | — | 4,103.34 | 4,103.34 | 0.12421 | 0.26964 | 4.50234 | 4,191.30 |
| 2031 | 1.56755 | 3.45078 | 13.7141 | 0.01126 | 0.04814 | 3.04302 | 3.09115 | 0.03738 | 0.72553 | 0.76291 | — | 3,548.67 | 3,548.67 | 0.11033 | 0.24142 | 3.47415 | 3,626.85 |

### 2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.07227 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 7,693.37 | 7,693.37 | 0.31208 | 0.06242 | 0.00000 | 7,719.77 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.08431 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 3.33632 | 32.3010 | 31.3632 | 0.05116 | 1.42237 | 4.18014 | 5.60251 | 1.30858 | 2.10009 | 3.40867 | — | 5,434.04 | 5,434.04 | 0.22043 | 0.04409 | 0.00000 | 5,452.69 |
| 2025 | 3.08834 | 28.6589 | 29.5358 | 0.06024 | 1.19058 | 2.60408 | 3.79466 | 1.09534 | 1.02392 | 2.11926 | — | 6,426.10 | 6,426.10 | 0.26067 | 0.05213 | 0.00000 | 6,448.15 |
| 2026 | 2.14106 | 19.3459 | 21.7251 | 0.04426 | 0.77739 | 1.64806 | 2.42545 | 0.71520 | 0.64802 | 1.36322 | — | 4,695.23 | 4,695.23 | 0.19046 | 0.03809 | 0.00000 | 4,711.35 |
| 2027 | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | 0.00000 | 0.24041 | 0.22118 | 0.00000 | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | 0.00000 | 1,718.07 |
| 2028 | 0.97562 | 8.96044 | 13.1046 | 0.02217 | 0.31406 | 0.00000 | 0.31406 | 0.28893 | 0.00000 | 0.28893 | — | 2,302.65 | 2,302.65 | 0.09341 | 0.01868 | 0.00000 | 2,310.55 |
| 2029 | 75.1989 | 9.62168 | 14.5570 | 0.02426 | 0.32290 | 0.00000 | 0.32290 | 0.29707 | 0.00000 | 0.29707 | — | 2,518.59 | 2,518.59 | 0.10217 | 0.02043 | 0.00000 | 2,527.23 |
| 2030 | 269.877 | 6.55171 | 9.98991 | 0.01794 | 0.19359 | 0.00000 | 0.19359 | 0.17810 | 0.00000 | 0.17810 | — | 1,806.87 | 1,806.87 | 0.07329 | 0.01466 | 0.00000 | 1,813.07 |
| 2031 | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | 0.00000 | 0.17374 | 0.15984 | 0.00000 | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | 0.00000 | 1,717.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 0.60888 | 5.89493 | 5.72379 | 0.00934 | 0.25958 | 0.76288 | 1.02246 | 0.23882 | 0.38327 | 0.62208 | — | 899.668 | 899.668 | 0.03649 | 0.00730 | 0.00000 | 902.755 |
| 2025 | 0.56362 | 5.23025 | 5.39028 | 0.01099 | 0.21728 | 0.47524 | 0.69253 | 0.19990 | 0.18687 | 0.38676 | — | 1,063.91 | 1,063.91 | 0.04316 | 0.00863 | 0.00000 | 1,067.57 |
| 2026 | 0.39074 | 3.53062 | 3.96484 | 0.00808 | 0.14187 | 0.30077 | 0.44264 | 0.13052 | 0.11826 | 0.24879 | — | 777.349 | 777.349 | 0.03153 | 0.00631 | 0.00000 | 780.017 |
| 2027 | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | 0.00000 | 0.04387 | 0.04036 | 0.00000 | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | 0.00000 | 284.447 |
| 2028 | 0.17805 | 1.63528 | 2.39159 | 0.00405 | 0.05732 | 0.00000 | 0.05732 | 0.05273 | 0.00000 | 0.05273 | — | 381.230 | 381.230 | 0.01546 | 0.00309 | 0.00000 | 382.538 |
| 2029 | 13.7238 | 1.75596 | 2.65665 | 0.00443 | 0.05893 | 0.00000 | 0.05893 | 0.05421 | 0.00000 | 0.05421 | — | 416.981 | 416.981 | 0.01691 | 0.00338 | 0.00000 | 418.412 |
| 2030 | 49.2525 | 1.19569 | 1.82316 | 0.00327 | 0.03533 | 0.00000 | 0.03533 | 0.03250 | 0.00000 | 0.03250 | — | 299.148 | 299.148 | 0.01213 | 0.00243 | 0.00000 | 300.174 |
| 2031 | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | 0.00000 | 0.03171 | 0.02917 | 0.00000 | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | 0.00000 | 284.418 |

## 2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 17.8504 | 27.8740 | 176.729 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 33,741.4 | 33,741.4 | 1.88795 | 2.35936 | 135.591 | 34,627.3 |
| 2024 | 16.4755 | 25.8142 | 164.118 | 0.06301 | 0.12602 | 23.8752 | 24.0012 | 0.12602 | 5.69672 | 5.82274 | — | 33,172.3 | 33,172.3 | 1.79741 | 2.36010 | 128.011 | 34,048.5 |
| 2025 | 15.8839 | 34.8796 | 156.362 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,920.1 | 40,920.1 | 2.23776 | 3.61944 | 137.406 | 42,192.0 |
| 2026 | 15.2360 | 33.1337 | 145.887 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,138.3 | 40,138.3 | 2.18365 | 3.61686 | 127.120 | 41,397.9 |
| 2027 | 13.5940 | 21.4822 | 131.813 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 31,189.1 | 31,189.1 | 1.57567 | 2.15850 | 100.950 | 31,972.7 |
| 2028 | 13.2921 | 20.1991 | 123.795 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 30,663.2 | 30,663.2 | 1.58145 | 2.15217 | 92.5624 | 31,436.6 |
| 2029 | 15.1311 | 20.2929 | 137.412 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 34,214.5 | 34,214.5 | 1.01132 | 2.26057 | 97.4150 | 35,010.9 |
| 2030 | 14.3605 | 18.9574 | 129.104 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 33,513.4 | 33,513.4 | 0.86385 | 2.26057 | 88.0884 | 34,296.8 |
| 2031 | 11.4690 | 16.3716 | 101.411 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 28,693.5 | 28,693.5 | 0.76531 | 2.02202 | 68.0435 | 29,383.2 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 16.9268 | 32.0989 | 167.993 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 32,352.7 | 32,352.7 | 2.08964 | 2.43007 | 3.50986 | 33,132.6 |
| 2024 | 16.2881 | 41.6078 | 160.355 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,351.9 | 40,351.9 | 2.60490 | 3.73397 | 3.77017 | 41,533.5 |
| 2025 | 15.6507 | 39.5287 | 149.234 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 39,596.5 | 39,596.5 | 2.52105 | 3.61944 | 3.57123 | 40,741.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 14.9111 | 36.9950 | 139.088 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 38,844.4 | 38,844.4 | 2.38567 | 3.61944 | 3.29341 | 39,985.9 |
| 2027 | 13.2811 | 24.7084 | 125.351 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 29,925.9 | 29,925.9 | 1.78682 | 2.22888 | 2.62414 | 30,637.4 |
| 2028 | 12.9884 | 23.3740 | 118.504 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 29,419.6 | 29,419.6 | 1.12394 | 2.23333 | 2.39537 | 30,115.6 |
| 2029 | 14.6775 | 23.9125 | 130.830 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,757.0 | 32,757.0 | 1.18023 | 2.35548 | 2.52654 | 33,491.0 |
| 2030 | 14.2552 | 22.4925 | 123.013 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,083.9 | 32,083.9 | 1.11722 | 2.34503 | 2.28435 | 32,812.9 |
| 2031 | 11.2369 | 19.5032 | 96.2573 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 27,524.7 | 27,524.7 | 0.90607 | 2.09240 | 1.76284 | 28,172.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 12.3478 | 22.0148 | 114.321 | 0.04489 | 0.08977 | 16.6986 | 16.7884 | 0.08977 | 3.98103 | 4.07080 | — | 23,117.8 | 23,117.8 | 1.44558 | 1.68064 | 41.6803 | 23,696.5 |
| 2024 | 11.4506 | 21.7790 | 106.847 | 0.05106 | 0.10720 | 17.0304 | 17.1376 | 0.10720 | 4.06980 | 4.17700 | — | 23,791.5 | 23,791.5 | 1.45241 | 1.84087 | 40.3527 | 24,416.7 |
| 2025 | 10.9878 | 26.7475 | 101.591 | 0.08365 | 0.20043 | 18.2577 | 18.4582 | 0.20043 | 4.41592 | 4.61634 | — | 28,351.0 | 28,351.0 | 1.69957 | 2.58531 | 42.5093 | 29,206.4 |
| 2026 | 10.4466 | 22.6562 | 93.9237 | 0.06947 | 0.15989 | 17.6763 | 17.8362 | 0.15989 | 4.25422 | 4.41412 | — | 25,629.4 | 25,629.4 | 1.53899 | 2.23602 | 37.3100 | 26,371.6 |
| 2027 | 9.44370 | 16.8349 | 85.6808 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.09002 | 3.97548 | 4.06550 | — | 21,442.0 | 21,442.0 | 1.22603 | 1.59206 | 31.1588 | 21,978.3 |
| 2028 | 9.13924 | 15.9072 | 80.6030 | 0.04513 | 0.09026 | 16.7579 | 16.8482 | 0.09026 | 3.99532 | 4.08558 | — | 21,105.4 | 21,105.4 | 0.70274 | 1.59814 | 28.5838 | 21,627.8 |
| 2029 | 9.23412 | 15.2231 | 79.3992 | 0.04501 | 0.09002 | 17.5462 | 17.6362 | 0.09002 | 4.17967 | 4.26968 | — | 21,419.0 | 21,419.0 | 0.71853 | 1.57899 | 27.0829 | 21,934.5 |
| 2030 | 10.0073 | 15.1203 | 83.5921 | 0.04501 | 0.09002 | 19.6551 | 19.7451 | 0.09002 | 4.67338 | 4.76340 | — | 22,977.5 | 22,977.5 | 0.67692 | 1.61400 | 27.1944 | 23,502.6 |
| 2031 | 7.93331 | 13.1094 | 65.9703 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.04501 | 3.97548 | 4.02049 | — | 19,722.1 | 19,722.1 | 0.59692 | 1.44430 | 20.9840 | 20,188.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.25348 | 4.01770 | 20.8635 | 0.00819 | 0.01638 | 3.04750 | 3.06388 | 0.01638 | 0.72654 | 0.74292 | — | 3,827.42 | 3,827.42 | 0.23933 | 0.27825 | 6.90065 | 3,923.22 |
| 2024 | 2.08973 | 3.97467 | 19.4995 | 0.00932 | 0.01956 | 3.10805 | 3.12762 | 0.01956 | 0.74274 | 0.76230 | — | 3,938.96 | 3,938.96 | 0.24046 | 0.30478 | 6.68085 | 4,042.47 |
| 2025 | 2.00528 | 4.88142 | 18.5404 | 0.01527 | 0.03658 | 3.33204 | 3.36862 | 0.03658 | 0.80590 | 0.84248 | — | 4,693.83 | 4,693.83 | 0.28138 | 0.42803 | 7.03790 | 4,835.46 |
| 2026 | 1.90650 | 4.13475 | 17.1411 | 0.01268 | 0.02918 | 3.22593 | 3.25511 | 0.02918 | 0.77640 | 0.80558 | — | 4,243.25 | 4,243.25 | 0.25480 | 0.37020 | 6.17710 | 4,366.11 |
| 2027 | 1.72348 | 3.07237 | 15.6367 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.01643 | 0.72553 | 0.74195 | — | 3,549.97 | 3,549.97 | 0.20298 | 0.26358 | 5.15869 | 3,638.75 |
| 2028 | 1.66791 | 2.90307 | 14.7100 | 0.00824 | 0.01647 | 3.05832 | 3.07480 | 0.01647 | 0.72915 | 0.74562 | — | 3,494.25 | 3,494.25 | 0.11635 | 0.26459 | 4.73237 | 3,580.73 |
| 2029 | 1.68523 | 2.77822 | 14.4904 | 0.00821 | 0.01643 | 3.20218 | 3.21861 | 0.01643 | 0.76279 | 0.77922 | — | 3,546.15 | 3,546.15 | 0.11896 | 0.26142 | 4.48389 | 3,631.51 |
| 2030 | 1.82633 | 2.75946 | 15.2556 | 0.00821 | 0.01643 | 3.58705 | 3.60348 | 0.01643 | 0.85289 | 0.86932 | — | 3,804.19 | 3,804.19 | 0.11207 | 0.26722 | 4.50234 | 3,891.13 |
| 2031 | 1.44783 | 2.39247 | 12.0396 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.00821 | 0.72553 | 0.73374 | — | 3,265.23 | 3,265.23 | 0.09883 | 0.23912 | 3.47415 | 3,342.43 |

## 2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 135.897 | 47.4975 | 270.183 | 0.29839 | 3.76791 | 0.00000 | 3.76791 | 3.73709 | 0.00000 | 3.73709 | 2,122.28 | 75,547.3 | 77,669.5 | 219.633 | 1.16173 | 33.6617 | 83,540.2 |
| Mit. | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | 0.00000 | 0.12648 | 0.09567 | 0.00000 | 0.09567 | 2,122.28 | 18,381.8 | 20,504.1 | 214.574 | 1.05411 | 33.6617 | 26,216.3 |
| % Reduced | 2% | 95% | 7% | 96% | 97% | — | 97% | 97% | — | 97% | — | 76% | 74% | 2% | 9% | — | 69% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 113.291 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | 0.00000 | 3.64143 | 3.64143 | 0.00000 | 3.64143 | 2,122.28 | 74,874.7 | 76,996.9 | 219.605 | 1.15614 | 33.6617 | 82,865.3 |
| Mit. | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 2,122.28 | 17,709.3 | 19,831.5 | 214.546 | 1.04853 | 33.6617 | 25,541.3 |
| % Reduced | 2% | 100% | 100% | 100% | 100% | — | 100% | 100% | — | 100% | — | 76% | 74% | 2% | 9% | — | 69% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 128.775 | 46.7228 | 191.095 | 0.29495 | 3.72806 | 0.00000 | 3.72806 | 3.70695 | 0.00000 | 3.70695 | 2,122.28 | 75,335.3 | 77,457.6 | 219.624 | 1.15997 | 33.6617 | 83,327.6 |
| Mit. | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | 0.00000 | 0.08663 | 0.06552 | 0.00000 | 0.06552 | 2,122.28 | 18,169.9 | 20,292.2 | 214.565 | 1.05236 | 33.6617 | 26,003.6 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 23.5014 | 8.52692 | 34.8749 | 0.05383 | 0.68037 | 0.00000 | 0.68037 | 0.67652 | 0.00000 | 0.67652 | 351.368 | 12,472.6 | 12,824.0 | 36.3613 | 0.19205 | 5.57308 | 13,795.8 |
| Mit. | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | 0.00000 | 0.01581 | 0.01196 | 0.00000 | 0.01196 | 351.368 | 3,008.24 | 3,359.61 | 35.5237 | 0.17423 | 5.57308 | 4,305.19 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |

## 2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 135.897 | 47.4975 | 270.183 | 0.29839 | 3.76791 | 0.00000 | 3.76791 | 3.73709 | 0.00000 | 3.73709 | 2,122.28 | 75,547.3 | 77,669.5 | 219.633 | 1.16173 | 33.6617 | 83,540.2 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 113.291 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | 0.00000 | 3.64143 | 3.64143 | 0.00000 | 3.64143 | 2,122.28 | 74,874.7 | 76,996.9 | 219.605 | 1.15614 | 33.6617 | 82,865.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | — | 0.08663 | 0.06552 | — | 0.06552 | 0.00000 | 460.672 | 460.672 | 0.01926 | 0.00382 | — | 462.293 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 128.775 | 46.7228 | 191.095 | 0.29495 | 3.72806 | 0.00000 | 3.72806 | 3.70695 | 0.00000 | 3.70695 | 2,122.28 | 75,335.3 | 77,457.6 | 219.624 | 1.15997 | 33.6617 | 83,327.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Energy | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 12,220.4 | 12,220.4 | 1.07271 | 0.04631 | — | 12,261.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Waste | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | 23.5014 | 8.52692 | 34.8749 | 0.05383 | 0.68037 | 0.00000 | 0.68037 | 0.67652 | 0.00000 | 0.67652 | 351.368 | 12,472.6 | 12,824.0 | 36.3613 | 0.19205 | 5.57308 | 13,795.8 |

## 2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | 0.00000 | 0.12648 | 0.09567 | 0.00000 | 0.09567 | 2,122.28 | 18,381.8 | 20,504.1 | 214.574 | 1.05411 | 33.6617 | 26,216.3 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 2,122.28 | 17,709.3 | 19,831.5 | 214.546 | 1.04853 | 33.6617 | 25,541.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | — | 0.08663 | 0.06552 | — | 0.06552 | 0.00000 | 460.672 | 460.672 | 0.01926 | 0.00382 | — | 462.293 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | 0.00000 | 0.08663 | 0.06552 | 0.00000 | 0.06552 | 2,122.28 | 18,169.9 | 20,292.2 | 214.565 | 1.05236 | 33.6617 | 26,003.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |
| Water | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Waste | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | 0.00000 | 0.01581 | 0.01196 | 0.00000 | 0.01196 | 351.368 | 3,008.24 | 3,359.61 | 35.5237 | 0.17423 | 5.57308 | 4,305.19 |

# 3. Construction Emissions Details

## 3.1. Demolition (2023)

### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.2. Demolition (2024)

### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29181 | 2.77648 | 2.42515 | 0.00363 | 0.11829 | — | 0.11829 | 0.10883 | — | 0.10883 | — | 382.072 | 382.072 | 0.01550 | 0.00310 | — | 383.383 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05326 | 0.50671 | 0.44259 | 0.00066 | 0.02159 | — | 0.02159 | 0.01986 | — | 0.01986 | — | 63.2563 | 63.2563 | 0.00257 | 0.00051 | — | 63.4734 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00806 | 0.00721 | 0.07363 | 0.00000 | 0.00000 | 0.01100 | 0.01100 | 0.00000 | 0.00257 | 0.00257 | — | 11.6771 | 11.6771 | 0.00079 | 0.00050 | 0.02328 | 11.8683 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00147 | 0.00132 | 0.01344 | 0.00000 | 0.00000 | 0.00201 | 0.00201 | 0.00000 | 0.00047 | 0.00047 | — | 1.93328 | 1.93328 | 0.00013 | 0.00008 | 0.00385 | 1.96493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29181 | 2.77648 | 2.42515 | 0.00363 | 0.11829 | — | 0.11829 | 0.10883 | — | 0.10883 | — | 382.072 | 382.072 | 0.01550 | 0.00310 | — | 383.383 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05326 | 0.50671 | 0.44259 | 0.00066 | 0.02159 | — | 0.02159 | 0.01986 | — | 0.01986 | — | 63.2563 | 63.2563 | 0.00257 | 0.00051 | — | 63.4734 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00806 | 0.00721 | 0.07363 | 0.00000 | 0.00000 | 0.01100 | 0.01100 | 0.00000 | 0.00257 | 0.00257 | — | 11.6771 | 11.6771 | 0.00079 | 0.00050 | 0.02328 | 11.8683 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00147 | 0.00132 | 0.01344 | 0.00000 | 0.00000 | 0.00201 | 0.00201 | 0.00000 | 0.00047 | 0.00047 | — | 1.93328 | 1.93328 | 0.00013 | 0.00008 | 0.00385 | 1.96493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.3. Site Preparation (2024)

### 3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.79777 | 17.7308 | 16.2376 | 0.02410 | 0.78887 | — | 0.78887 | 0.72576 | — | 0.72576 | — | 2,611.60 | 2,611.60 | 0.10594 | 0.02119 | — | 2,620.56 |
| Dust From Material Movement | — | — | — | — | — | 3.78061 | 3.78061 | — | 1.94299 | 1.94299 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32809 | 3.23586 | 2.96336 | 0.00440 | 0.14397 | — | 0.14397 | 0.13245 | — | 0.13245 | — | 432.380 | 432.380 | 0.01754 | 0.00351 | — | 433.864 |
| Dust From Material Movement | — | — | — | — | — | 0.68996 | 0.68996 | — | 0.35460 | 0.35460 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08697 | 0.06254 | 0.85532 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 129.007 | 129.007 | 0.00751 | 0.00520 | 0.56426 | 131.308 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08542 | 0.08063 | 0.81082 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.567 | 121.567 | 0.00905 | 0.00520 | 0.01463 | 123.357 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04156 | 0.03720 | 0.37978 | 0.00000 | 0.00000 | 0.05672 | 0.05672 | 0.00000 | 0.01328 | 0.01328 | — | 60.2295 | 60.2295 | 0.00408 | 0.00256 | 0.12007 | 61.2154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00758 | 0.00679 | 0.06931 | 0.00000 | 0.00000 | 0.01035 | 0.01035 | 0.00000 | 0.00242 | 0.00242 | — | 9.97168 | 9.97168 | 0.00068 | 0.00042 | 0.01988 | 10.1349 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.79777 | 17.7308 | 16.2376 | 0.02410 | 0.78887 | — | 0.78887 | 0.72576 | — | 0.72576 | — | 2,611.60 | 2,611.60 | 0.10594 | 0.02119 | — | 2,620.56 |
| Dust From Material Movement | — | — | — | — | — | 3.78061 | 3.78061 | — | 1.94299 | 1.94299 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32809 | 3.23586 | 2.96336 | 0.00440 | 0.14397 | — | 0.14397 | 0.13245 | — | 0.13245 | — | 432.380 | 432.380 | 0.01754 | 0.00351 | — | 433.864 |
| Dust From Material Movement | — | — | — | — | — | 0.68996 | 0.68996 | — | 0.35460 | 0.35460 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08697 | 0.06254 | 0.85532 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 129.007 | 129.007 | 0.00751 | 0.00520 | 0.56426 | 131.308 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.08542 | 0.08063 | 0.81082 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.567 | 121.567 | 0.00905 | 0.00520 | 0.01463 | 123.357 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04156 | 0.03720 | 0.37978 | 0.00000 | 0.00000 | 0.05672 | 0.05672 | 0.00000 | 0.01328 | 0.01328 | — | 60.2295 | 60.2295 | 0.00408 | 0.00256 | 0.12007 | 61.2154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00758 | 0.00679 | 0.06931 | 0.00000 | 0.00000 | 0.01035 | 0.01035 | 0.00000 | 0.00242 | 0.00242 | — | 9.97168 | 9.97168 | 0.00068 | 0.00042 | 0.01988 | 10.1349 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.4. Grading (2024)

### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.51698 | 34.2879 | 30.1743 | 0.06092 | 1.44805 | — | 1.44805 | 1.33221 | — | 1.33221 | — | 6,598.19 | 6,598.19 | 0.26765 | 0.05353 | — | 6,620.83 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38542 | 3.75757 | 3.30677 | 0.00668 | 0.15869 | — | 0.15869 | 0.14600 | — | 0.14600 | — | 723.089 | 723.089 | 0.02933 | 0.00587 | — | 725.571 |
| Dust From Material Movement | — | — | — | — | — | 0.39953 | 0.39953 | — | 0.15709 | 0.15709 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07034 | 0.68576 | 0.60349 | 0.00122 | 0.02896 | — | 0.02896 | 0.02664 | — | 0.02664 | — | 119.716 | 119.716 | 0.00486 | 0.00097 | — | 120.127 |
| Dust From Material Movement | — | — | — | — | — | 0.07291 | 0.07291 | — | 0.02867 | 0.02867 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09763 | 0.09215 | 0.92666 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 138.934 | 138.934 | 0.01035 | 0.00594 | 0.01672 | 140.979 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.6884 | 4.13743 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,519.35 | 8,519.35 | 0.51267 | 1.37313 | 0.44945 | 8,941.81 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.01055 | 0.00945 | 0.09645 | 0.00000 | 0.00000 | 0.01441 | 0.01441 | 0.00000 | 0.00337 | 0.00337 | — | 15.2964 | 15.2964 | 0.00104 | 0.00065 | 0.03049 | 15.5468 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02005 | 1.25833 | 0.45031 | 0.00593 | 0.01694 | 0.22857 | 0.24551 | 0.01694 | 0.06420 | 0.08114 | — | 933.397 | 933.397 | 0.05618 | 0.15048 | 0.81553 | 980.460 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00193 | 0.00172 | 0.01760 | 0.00000 | 0.00000 | 0.00263 | 0.00263 | 0.00000 | 0.00062 | 0.00062 | — | 2.53249 | 2.53249 | 0.00017 | 0.00011 | 0.00505 | 2.57394 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00366 | 0.22965 | 0.08218 | 0.00108 | 0.00309 | 0.04171 | 0.04481 | 0.00309 | 0.01172 | 0.01481 | — | 154.535 | 154.535 | 0.00930 | 0.02491 | 0.13502 | 162.326 |

### 3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.51698 | 34.2879 | 30.1743 | 0.06092 | 1.44805 | — | 1.44805 | 1.33221 | — | 1.33221 | — | 6,598.19 | 6,598.19 | 0.26765 | 0.05353 | — | 6,620.83 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38542 | 3.75757 | 3.30677 | 0.00668 | 0.15869 | — | 0.15869 | 0.14600 | — | 0.14600 | — | 723.089 | 723.089 | 0.02933 | 0.00587 | — | 725.571 |
| Dust From Material Movement | — | — | — | — | — | 0.39953 | 0.39953 | — | 0.15709 | 0.15709 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07034 | 0.68576 | 0.60349 | 0.00122 | 0.02896 | — | 0.02896 | 0.02664 | — | 0.02664 | — | 119.716 | 119.716 | 0.00486 | 0.00097 | — | 120.127 |
| Dust From Material Movement | — | — | — | — | — | 0.07291 | 0.07291 | — | 0.02867 | 0.02867 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09763 | 0.09215 | 0.92666 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 138.934 | 138.934 | 0.01035 | 0.00594 | 0.01672 | 140.979 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.6884 | 4.13743 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,519.35 | 8,519.35 | 0.51267 | 1.37313 | 0.44945 | 8,941.81 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01055 | 0.00945 | 0.09645 | 0.00000 | 0.00000 | 0.01441 | 0.01441 | 0.00000 | 0.00337 | 0.00337 | — | 15.2964 | 15.2964 | 0.00104 | 0.00065 | 0.03049 | 15.5468 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02005 | 1.25833 | 0.45031 | 0.00593 | 0.01694 | 0.22857 | 0.24551 | 0.01694 | 0.06420 | 0.08114 | — | 933.397 | 933.397 | 0.05618 | 0.15048 | 0.81553 | 980.460 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00193 | 0.00172 | 0.01760 | 0.00000 | 0.00000 | 0.00263 | 0.00263 | 0.00000 | 0.00062 | 0.00062 | — | 2.53249 | 2.53249 | 0.00017 | 0.00011 | 0.00505 | 2.57394 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.00366 | 0.22965 | 0.08218 | 0.00108 | 0.00309 | 0.04171 | 0.04481 | 0.00309 | 0.01172 | 0.01481 | — | 154.535 | 154.535 | 0.00930 | 0.02491 | 0.13502 | 162.326 |

## 3.5. Grading (2025)

### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28341 | 21.1987 | 20.2214 | 0.04352 | 0.88212 | — | 0.88212 | 0.81155 | — | 0.81155 | — | 4,713.47 | 4,713.47 | 0.19120 | 0.03824 | — | 4,729.65 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 2.60408 | 2.60408 | — | 1.02392 | 1.02392 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41672 | 3.86877 | 3.69041 | 0.00794 | 0.16099 | — | 0.16099 | 0.14811 | — | 0.14811 | — | 780.369 | 780.369 | 0.03166 | 0.00633 | — | 783.047 |
| Dust From Material Movement | — | — | — | — | — | 0.47524 | 0.47524 | — | 0.18687 | 0.18687 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09498 | 0.06598 | 0.90670 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 144.589 | 144.589 | 0.00814 | 0.00594 | 0.59710 | 147.159 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.6115 | 3.98801 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,354.76 | 8,354.76 | 0.51009 | 1.32161 | 17.1675 | 8,778.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.2169 | 4.03180 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,358.54 | 8,358.54 | 0.51009 | 1.32161 | 0.44503 | 8,765.58 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.06564 | 0.05467 | 0.58420 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 97.7910 | 97.7910 | 0.00645 | 0.00424 | 0.18468 | 99.4011 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.13065 | 7.86487 | 2.86146 | 0.03864 | 0.11041 | 1.48980 | 1.60021 | 0.11041 | 0.41845 | 0.52886 | — | 5,968.82 | 5,968.82 | 0.36435 | 0.94400 | 5.31550 | 6,264.56 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01198 | 0.00998 | 0.10662 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 16.1904 | 16.1904 | 0.00107 | 0.00070 | 0.03058 | 16.4570 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02384 | 1.43534 | 0.52222 | 0.00705 | 0.02015 | 0.27189 | 0.29204 | 0.02015 | 0.07637 | 0.09652 | — | 988.207 | 988.207 | 0.06032 | 0.15629 | 0.88004 | 1,037.17 |

### 3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28341 | 21.1987 | 20.2214 | 0.04352 | 0.88212 | — | 0.88212 | 0.81155 | — | 0.81155 | — | 4,713.47 | 4,713.47 | 0.19120 | 0.03824 | — | 4,729.65 |
| Dust From Material Movement | — | — | — | — | — | 2.60408 | 2.60408 | — | 1.02392 | 1.02392 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41672 | 3.86877 | 3.69041 | 0.00794 | 0.16099 | — | 0.16099 | 0.14811 | — | 0.14811 | — | 780.369 | 780.369 | 0.03166 | 0.00633 | — | 783.047 |
| Dust From Material Movement | — | — | — | — | — | 0.47524 | 0.47524 | — | 0.18687 | 0.18687 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09498 | 0.06598 | 0.90670 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 144.589 | 144.589 | 0.00814 | 0.00594 | 0.59710 | 147.159 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.6115 | 3.98801 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,354.76 | 8,354.76 | 0.51009 | 1.32161 | 17.1675 | 8,778.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.17776 | 11.2169 | 4.03180 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,358.54 | 8,358.54 | 0.51009 | 1.32161 | 0.44503 | 8,765.58 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06564 | 0.05467 | 0.58420 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 97.7910 | 97.7910 | 0.00645 | 0.00424 | 0.18468 | 99.4011 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.13065 | 7.86487 | 2.86146 | 0.03864 | 0.11041 | 1.48980 | 1.60021 | 0.11041 | 0.41845 | 0.52886 | — | 5,968.82 | 5,968.82 | 0.36435 | 0.94400 | 5.31550 | 6,264.56 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01198 | 0.00998 | 0.10662 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 16.1904 | 16.1904 | 0.00107 | 0.00070 | 0.03058 | 16.4570 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02384 | 1.43534 | 0.52222 | 0.00705 | 0.02015 | 0.27189 | 0.29204 | 0.02015 | 0.07637 | 0.09652 | — | 988.207 | 988.207 | 0.06032 | 0.15629 | 0.88004 | 1,037.17 |

## 3.6. Grading (2026)

### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.37606 | 12.3073 | 12.4634 | 0.02754 | 0.50692 | — | 0.50692 | 0.46637 | — | 0.46637 | — | 2,982.92 | 2,982.92 | 0.12100 | 0.02420 | — | 2,993.15 |
| Dust From Material Movement | — | — | — | — | — | 1.64806 | 1.64806 | — | 0.64802 | 0.64802 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25113 | 2.24608 | 2.27458 | 0.00503 | 0.09251 | — | 0.09251 | 0.08511 | — | 0.08511 | — | 493.856 | 493.856 | 0.02003 | 0.00401 | — | 495.551 |
| Dust From Material Movement | — | — | — | — | — | 0.30077 | 0.30077 | — | 0.11826 | 0.11826 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.18806 | 10.2869 | 3.83343 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,187.74 | 8,187.74 | 0.45599 | 1.31903 | 16.1360 | 8,608.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 10.8459 | 3.87723 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,191.63 | 8,191.63 | 0.45599 | 1.32161 | 0.41850 | 8,597.28 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03975 | 0.03231 | 0.34596 | 0.00000 | 0.00000 | 0.05942 | 0.05942 | 0.00000 | 0.01391 | 0.01391 | — | 60.7266 | 60.7266 | 0.00408 | 0.00268 | 0.10797 | 61.7367 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.08269 | 4.80746 | 1.74107 | 0.02446 | 0.06988 | 0.94286 | 1.01273 | 0.06988 | 0.26483 | 0.33471 | — | 3,702.05 | 3,702.05 | 0.20613 | 0.59627 | 3.14756 | 3,888.04 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00725 | 0.00590 | 0.06314 | 0.00000 | 0.00000 | 0.01084 | 0.01084 | 0.00000 | 0.00254 | 0.00254 | — | 10.0540 | 10.0540 | 0.00068 | 0.00044 | 0.01788 | 10.2212 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.01509 | 0.87736 | 0.31775 | 0.00446 | 0.01275 | 0.17207 | 0.18482 | 0.01275 | 0.04833 | 0.06108 | — | 612.916 | 612.916 | 0.03413 | 0.09872 | 0.52111 | 643.709 |

### 3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.37606 | 12.3073 | 12.4634 | 0.02754 | 0.50692 | — | 0.50692 | 0.46637 | — | 0.46637 | — | 2,982.92 | 2,982.92 | 0.12100 | 0.02420 | — | 2,993.15 |
| Dust From Material Movement | — | — | — | — | — | 1.64806 | 1.64806 | — | 0.64802 | 0.64802 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25113 | 2.24608 | 2.27458 | 0.00503 | 0.09251 | — | 0.09251 | 0.08511 | — | 0.08511 | — | 493.856 | 493.856 | 0.02003 | 0.00401 | — | 495.551 |
| Dust From Material Movement | — | — | — | — | — | 0.30077 | 0.30077 | — | 0.11826 | 0.11826 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.2869 | 3.83343 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,187.74 | 8,187.74 | 0.45599 | 1.31903 | 16.1360 | 8,608.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 10.8459 | 3.87723 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,191.63 | 8,191.63 | 0.45599 | 1.32161 | 0.41850 | 8,597.28 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03975 | 0.03231 | 0.34596 | 0.00000 | 0.00000 | 0.05942 | 0.05942 | 0.00000 | 0.01391 | 0.01391 | — | 60.7266 | 60.7266 | 0.00408 | 0.00268 | 0.10797 | 61.7367 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.08269 | 4.80746 | 1.74107 | 0.02446 | 0.06988 | 0.94286 | 1.01273 | 0.06988 | 0.26483 | 0.33471 | — | 3,702.05 | 3,702.05 | 0.20613 | 0.59627 | 3.14756 | 3,888.04 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00725 | 0.00590 | 0.06314 | 0.00000 | 0.00000 | 0.01084 | 0.01084 | 0.00000 | 0.00254 | 0.00254 | — | 10.0540 | 10.0540 | 0.00068 | 0.00044 | 0.01788 | 10.2212 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.01509 | 0.87736 | 0.31775 | 0.00446 | 0.01275 | 0.17207 | 0.18482 | 0.01275 | 0.04833 | 0.06108 | — | 612.916 | 612.916 | 0.03413 | 0.09872 | 0.52111 | 643.709 |

## 3.7. Building Construction (2023)

### 3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.2352 | 12.8835 | 168.143 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,980.5 | 23,980.5 | 1.44072 | 0.94805 | 110.562 | 24,409.6 |
| Vendor | 0.53419 | 14.9300 | 7.79565 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,648.20 | 9,648.20 | 0.44046 | 1.40686 | 24.5092 | 10,103.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.3575 | 16.2533 | 159.293 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,591.6 | 22,591.6 | 1.65187 | 1.01843 | 2.85937 | 22,939.2 |
| Vendor | 0.49239 | 15.7692 | 7.95177 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,655.02 | 9,655.02 | 0.43001 | 1.40686 | 0.63706 | 10,085.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9262 | 10.9024 | 108.252 | 0.00000 | 0.00000 | 14.9461 | 14.9461 | 0.00000 | 3.49913 | 3.49913 | — | 16,167.2 | 16,167.2 | 1.12654 | 0.67532 | 33.9468 | 16,430.5 |
| Vendor | 0.36563 | 11.0612 | 5.56006 | 0.04489 | 0.08977 | 1.68230 | 1.77208 | 0.08977 | 0.46546 | 0.55523 | — | 6,874.71 | 6,874.71 | 0.31375 | 1.00214 | 7.57397 | 7,188.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.17653 | 1.98969 | 19.7560 | 0.00000 | 0.00000 | 2.72766 | 2.72766 | 0.00000 | 0.63859 | 0.63859 | — | 2,676.66 | 2,676.66 | 0.18651 | 0.11181 | 5.62028 | 2,720.26 |
| Vendor | 0.06673 | 2.01866 | 1.01471 | 0.00819 | 0.01638 | 0.30702 | 0.32340 | 0.01638 | 0.08495 | 0.10133 | — | 1,138.19 | 1,138.19 | 0.05195 | 0.16592 | 1.25396 | 1,190.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.2352 | 12.8835 | 168.143 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,980.5 | 23,980.5 | 1.44072 | 0.94805 | 110.562 | 24,409.6 |
| Vendor | 0.53419 | 14.9300 | 7.79565 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,648.20 | 9,648.20 | 0.44046 | 1.40686 | 24.5092 | 10,103.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.3575 | 16.2533 | 159.293 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,591.6 | 22,591.6 | 1.65187 | 1.01843 | 2.85937 | 22,939.2 |
| Vendor | 0.49239 | 15.7692 | 7.95177 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,655.02 | 9,655.02 | 0.43001 | 1.40686 | 0.63706 | 10,085.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9262 | 10.9024 | 108.252 | 0.00000 | 0.00000 | 14.9461 | 14.9461 | 0.00000 | 3.49913 | 3.49913 | — | 16,167.2 | 16,167.2 | 1.12654 | 0.67532 | 33.9468 | 16,430.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.36563 | 11.0612 | 5.56006 | 0.04489 | 0.08977 | 1.68230 | 1.77208 | 0.08977 | 0.46546 | 0.55523 | — | 6,874.71 | 6,874.71 | 0.31375 | 1.00214 | 7.57397 | 7,188.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.17653 | 1.98969 | 19.7560 | 0.00000 | 0.00000 | 2.72766 | 2.72766 | 0.00000 | 0.63859 | 0.63859 | — | 2,676.66 | 2,676.66 | 0.18651 | 0.11181 | 5.62028 | 2,720.26 |
| Vendor | 0.06673 | 2.01866 | 1.01471 | 0.00819 | 0.01638 | 0.30702 | 0.32340 | 0.01638 | 0.08495 | 0.10133 | — | 1,138.19 | 1,138.19 | 0.05195 | 0.16592 | 1.25396 | 1,190.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.8. Building Construction (2024)

### 3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.8648 | 11.4096 | 156.034 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,534.5 | 23,534.5 | 1.37034 | 0.94805 | 102.937 | 23,954.2 |
| Vendor | 0.52374 | 14.3420 | 7.22885 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,508.80 | 9,508.80 | 0.41956 | 1.40686 | 24.5092 | 9,963.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.5833 | 14.7092 | 147.917 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,177.2 | 22,177.2 | 1.65187 | 0.94805 | 2.66874 | 22,503.7 |
| Vendor | 0.42938 | 15.1181 | 7.37452 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,516.40 | 9,516.40 | 0.43001 | 1.40686 | 0.63526 | 9,947.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0102 | 9.85630 | 100.624 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 15,958.0 | 15,958.0 | 1.08232 | 0.67903 | 31.8123 | 16,219.3 |
| Vendor | 0.36016 | 10.6105 | 5.22230 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,812.86 | 6,812.86 | 0.30799 | 1.00765 | 7.55105 | 7,128.39 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.00936 | 1.79877 | 18.3639 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,642.04 | 2,642.04 | 0.17919 | 0.11242 | 5.26688 | 2,685.29 |
| Vendor | 0.06573 | 1.93642 | 0.95307 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,127.95 | 1,127.95 | 0.05099 | 0.16683 | 1.25016 | 1,180.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.8648 | 11.4096 | 156.034 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,534.5 | 23,534.5 | 1.37034 | 0.94805 | 102.937 | 23,954.2 |
| Vendor | 0.52374 | 14.3420 | 7.22885 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,508.80 | 9,508.80 | 0.41956 | 1.40686 | 24.5092 | 9,963.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.5833 | 14.7092 | 147.917 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,177.2 | 22,177.2 | 1.65187 | 0.94805 | 2.66874 | 22,503.7 |
| Vendor | 0.42938 | 15.1181 | 7.37452 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,516.40 | 9,516.40 | 0.43001 | 1.40686 | 0.63526 | 9,947.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0102 | 9.85630 | 100.624 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 15,958.0 | 15,958.0 | 1.08232 | 0.67903 | 31.8123 | 16,219.3 |
| Vendor | 0.36016 | 10.6105 | 5.22230 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,812.86 | 6,812.86 | 0.30799 | 1.00765 | 7.55105 | 7,128.39 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.00936 | 1.79877 | 18.3639 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,642.04 | 2,642.04 | 0.17919 | 0.11242 | 5.26688 | 2,685.29 |
| Vendor | 0.06573 | 1.93642 | 0.95307 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,127.95 | 1,127.95 | 0.05099 | 0.16683 | 1.25016 | 1,180.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.9. Building Construction (2025)

### 3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.1610 | 10.5320 | 144.732 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,079.8 | 23,079.8 | 1.29996 | 0.94805 | 95.3122 | 23,490.1 |
| Vendor | 0.43983 | 13.6701 | 6.73552 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,340.94 | 9,340.94 | 0.41956 | 1.34384 | 24.3290 | 9,776.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.9499 | 13.8315 | 137.418 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,752.4 | 21,752.4 | 1.58149 | 0.94805 | 2.47812 | 22,076.9 |
| Vendor | 0.42938 | 14.3936 | 6.92330 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,349.28 | 9,349.28 | 0.41956 | 1.34384 | 0.63255 | 9,760.87 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.4774 | 8.72638 | 93.2523 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,609.8 | 15,609.8 | 1.02909 | 0.67718 | 29.4787 | 15,866.8 |
| Vendor | 0.31417 | 10.1016 | 4.89319 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,674.59 | 6,674.59 | 0.29969 | 0.95989 | 7.53041 | 6,975.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.91212 | 1.59256 | 17.0185 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,584.38 | 2,584.38 | 0.17038 | 0.11211 | 4.88054 | 2,626.93 |
| Vendor | 0.05734 | 1.84354 | 0.89301 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,105.06 | 1,105.06 | 0.04962 | 0.15892 | 1.24675 | 1,154.90 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.1610 | 10.5320 | 144.732 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,079.8 | 23,079.8 | 1.29996 | 0.94805 | 95.3122 | 23,490.1 |
| Vendor | 0.43983 | 13.6701 | 6.73552 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,340.94 | 9,340.94 | 0.41956 | 1.34384 | 24.3290 | 9,776.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.9499 | 13.8315 | 137.418 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,752.4 | 21,752.4 | 1.58149 | 0.94805 | 2.47812 | 22,076.9 |
| Vendor | 0.42938 | 14.3936 | 6.92330 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,349.28 | 9,349.28 | 0.41956 | 1.34384 | 0.63255 | 9,760.87 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.4774 | 8.72638 | 93.2523 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,609.8 | 15,609.8 | 1.02909 | 0.67718 | 29.4787 | 15,866.8 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.31417 | 10.1016 | 4.89319 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,674.59 | 6,674.59 | 0.29969 | 0.95989 | 7.53041 | 6,975.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.91212 | 1.59256 | 17.0185 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,584.38 | 2,584.38 | 0.17038 | 0.11211 | 4.88054 | 2,626.93 |
| Vendor | 0.05734 | 1.84354 | 0.89301 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,105.06 | 1,105.06 | 0.04962 | 0.15892 | 1.24675 | 1,154.90 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.10. Building Construction (2026)

### 3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.5276 | 9.72470 | 134.904 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,642.1 | 22,642.1 | 1.29996 | 0.94805 | 88.3544 | 23,045.5 |
| Vendor | 0.42938 | 13.0612 | 6.30520 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,166.61 | 9,166.61 | 0.41956 | 1.34384 | 22.0763 | 9,599.64 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.2460 | 12.2873 | 127.937 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,343.5 | 21,343.5 | 1.51110 | 0.94805 | 2.28749 | 21,666.1 |
| Vendor | 0.39803 | 13.7847 | 6.47208 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,175.54 | 9,175.54 | 0.40911 | 1.34384 | 0.57308 | 9,586.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.0249 | 8.14975 | 87.2583 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,316.4 | 15,316.4 | 1.02909 | 0.67718 | 27.2321 | 15,571.2 |
| Vendor | 0.29924 | 9.66666 | 4.57835 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,550.23 | 6,550.23 | 0.29969 | 0.95989 | 6.82243 | 6,850.59 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.82955 | 1.48733 | 15.9246 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,535.81 | 2,535.81 | 0.17038 | 0.11211 | 4.50858 | 2,577.99 |
| Vendor | 0.05461 | 1.76416 | 0.83555 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,084.46 | 1,084.46 | 0.04962 | 0.15892 | 1.12953 | 1,134.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.5276 | 9.72470 | 134.904 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,642.1 | 22,642.1 | 1.29996 | 0.94805 | 88.3544 | 23,045.5 |
| Vendor | 0.42938 | 13.0612 | 6.30520 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,166.61 | 9,166.61 | 0.41956 | 1.34384 | 22.0763 | 9,599.64 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.2460 | 12.2873 | 127.937 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,343.5 | 21,343.5 | 1.51110 | 0.94805 | 2.28749 | 21,666.1 |
| Vendor | 0.39803 | 13.7847 | 6.47208 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,175.54 | 9,175.54 | 0.40911 | 1.34384 | 0.57308 | 9,586.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.0249 | 8.14975 | 87.2583 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,316.4 | 15,316.4 | 1.02909 | 0.67718 | 27.2321 | 15,571.2 |
| Vendor | 0.29924 | 9.66666 | 4.57835 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,550.23 | 6,550.23 | 0.29969 | 0.95989 | 6.82243 | 6,850.59 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.82955 | 1.48733 | 15.9246 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,535.81 | 2,535.81 | 0.17038 | 0.11211 | 4.50858 | 2,577.99 |
| Vendor | 0.05461 | 1.76416 | 0.83555 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,084.46 | 1,084.46 | 0.04962 | 0.15892 | 1.12953 | 1,134.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.11. Building Construction (2027)

### 3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 13.2276 | 8.98780 | 125.812 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,218.3 | 22,218.3 | 1.22958 | 0.87767 | 81.3966 | 22,592.0 |
| Vendor | 0.36637 | 12.4944 | 6.00090 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,970.79 | 8,970.79 | 0.34610 | 1.28083 | 19.5533 | 9,380.69 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.9461 | 11.4800 | 119.194 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,945.8 | 20,945.8 | 1.44072 | 0.94805 | 2.11593 | 21,266.5 |
| Vendor | 0.33502 | 13.2284 | 6.15733 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,980.09 | 8,980.09 | 0.34610 | 1.28083 | 0.50821 | 9,370.94 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.19693 | 7.57312 | 81.3648 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,031.5 | 15,031.5 | 0.97881 | 0.67718 | 25.1216 | 15,282.9 |
| Vendor | 0.24676 | 9.26180 | 4.31599 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,410.49 | 6,410.49 | 0.24721 | 0.91488 | 6.03720 | 6,695.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.67844 | 1.38209 | 14.8491 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,488.64 | 2,488.64 | 0.16205 | 0.11211 | 4.15916 | 2,530.26 |
| Vendor | 0.04503 | 1.69028 | 0.78767 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,061.33 | 1,061.33 | 0.04093 | 0.15147 | 0.99953 | 1,108.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 13.2276 | 8.98780 | 125.812 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,218.3 | 22,218.3 | 1.22958 | 0.87767 | 81.3966 | 22,592.0 |
| Vendor | 0.36637 | 12.4944 | 6.00090 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,970.79 | 8,970.79 | 0.34610 | 1.28083 | 19.5533 | 9,380.69 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.9461 | 11.4800 | 119.194 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,945.8 | 20,945.8 | 1.44072 | 0.94805 | 2.11593 | 21,266.5 |
| Vendor | 0.33502 | 13.2284 | 6.15733 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,980.09 | 8,980.09 | 0.34610 | 1.28083 | 0.50821 | 9,370.94 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.19693 | 7.57312 | 81.3648 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,031.5 | 15,031.5 | 0.97881 | 0.67718 | 25.1216 | 15,282.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.24676 | 9.26180 | 4.31599 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,410.49 | 6,410.49 | 0.24721 | 0.91488 | 6.03720 | 6,695.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.67844 | 1.38209 | 14.8491 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,488.64 | 2,488.64 | 0.16205 | 0.11211 | 4.15916 | 2,530.26 |
| Vendor | 0.04503 | 1.69028 | 0.78767 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,061.33 | 1,061.33 | 0.04093 | 0.15147 | 0.99953 | 1,108.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.12. Building Construction (2028)

### 3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.8757 | 8.18052 | 117.599 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,814.4 | 21,814.4 | 1.22958 | 0.87767 | 74.8201 | 22,181.5 |
| Vendor | 0.35592 | 11.9802 | 5.64404 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,746.30 | 8,746.30 | 0.34610 | 1.27038 | 17.3908 | 9,150.92 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.5942 | 10.6727 | 112.135 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,566.9 | 20,566.9 | 0.77420 | 0.94805 | 1.93484 | 20,870.7 |
| Vendor | 0.33502 | 12.6511 | 5.84258 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,756.06 | 8,756.06 | 0.34610 | 1.28083 | 0.45144 | 9,146.85 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.86926 | 7.01566 | 76.3067 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 14,800.4 | 14,800.4 | 0.45370 | 0.67903 | 23.1424 | 15,037.3 |
| Vendor | 0.24744 | 8.87373 | 4.10238 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,267.38 | 6,267.38 | 0.24789 | 0.91739 | 5.38254 | 6,552.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61864 | 1.28036 | 13.9260 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,450.38 | 2,450.38 | 0.07511 | 0.11242 | 3.83149 | 2,489.59 |
| Vendor | 0.04516 | 1.61946 | 0.74868 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,037.64 | 1,037.64 | 0.04104 | 0.15188 | 0.89114 | 1,084.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.8757 | 8.18052 | 117.599 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,814.4 | 21,814.4 | 1.22958 | 0.87767 | 74.8201 | 22,181.5 |
| Vendor | 0.35592 | 11.9802 | 5.64404 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,746.30 | 8,746.30 | 0.34610 | 1.27038 | 17.3908 | 9,150.92 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.5942 | 10.6727 | 112.135 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,566.9 | 20,566.9 | 0.77420 | 0.94805 | 1.93484 | 20,870.7 |
| Vendor | 0.33502 | 12.6511 | 5.84258 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,756.06 | 8,756.06 | 0.34610 | 1.28083 | 0.45144 | 9,146.85 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.86926 | 7.01566 | 76.3067 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 14,800.4 | 14,800.4 | 0.45370 | 0.67903 | 23.1424 | 15,037.3 |
| Vendor | 0.24744 | 8.87373 | 4.10238 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,267.38 | 6,267.38 | 0.24789 | 0.91739 | 5.38254 | 6,552.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61864 | 1.28036 | 13.9260 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,450.38 | 2,450.38 | 0.07511 | 0.11242 | 3.83149 | 2,489.59 |
| Vendor | 0.04516 | 1.61946 | 0.74868 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,037.64 | 1,037.64 | 0.04104 | 0.15188 | 0.89114 | 1,084.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.13. Building Construction (2029)

### 3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.3127 | 7.37323 | 110.052 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,428.1 | 21,428.1 | 0.56306 | 0.87767 | 68.3388 | 21,772.1 |
| Vendor | 0.35592 | 11.4450 | 5.35019 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,500.82 | 8,500.82 | 0.33565 | 1.20737 | 15.4084 | 8,884.41 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9607 | 9.86546 | 104.410 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,205.0 | 20,205.0 | 0.70382 | 0.94805 | 1.77281 | 20,506.9 |
| Vendor | 0.32457 | 12.0739 | 5.53829 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,510.95 | 8,510.95 | 0.33565 | 1.21782 | 0.39918 | 8,882.65 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.49311 | 6.41986 | 71.3579 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,500.1 | 14,500.1 | 0.45246 | 0.67718 | 21.1048 | 14,734.3 |
| Vendor | 0.24676 | 8.42970 | 3.88874 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,075.02 | 6,075.02 | 0.23975 | 0.86241 | 4.74995 | 6,342.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.54999 | 1.17162 | 13.0228 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,400.66 | 2,400.66 | 0.07491 | 0.11211 | 3.49415 | 2,439.44 |
| Vendor | 0.04503 | 1.53842 | 0.70970 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,005.79 | 1,005.79 | 0.03969 | 0.14278 | 0.78641 | 1,050.12 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.3127 | 7.37323 | 110.052 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,428.1 | 21,428.1 | 0.56306 | 0.87767 | 68.3388 | 21,772.1 |
| Vendor | 0.35592 | 11.4450 | 5.35019 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,500.82 | 8,500.82 | 0.33565 | 1.20737 | 15.4084 | 8,884.41 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9607 | 9.86546 | 104.410 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,205.0 | 20,205.0 | 0.70382 | 0.94805 | 1.77281 | 20,506.9 |
| Vendor | 0.32457 | 12.0739 | 5.53829 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,510.95 | 8,510.95 | 0.33565 | 1.21782 | 0.39918 | 8,882.65 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.49311 | 6.41986 | 71.3579 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,500.1 | 14,500.1 | 0.45246 | 0.67718 | 21.1048 | 14,734.3 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.24676 | 8.42970 | 3.88874 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,075.02 | 6,075.02 | 0.23975 | 0.86241 | 4.74995 | 6,342.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.54999 | 1.17162 | 13.0228 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,400.66 | 2,400.66 | 0.07491 | 0.11211 | 3.49415 | 2,439.44 |
| Vendor | 0.04503 | 1.53842 | 0.70970 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,005.79 | 1,005.79 | 0.03969 | 0.14278 | 0.78641 | 1,050.12 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.14. Building Construction (2030)

### 3.14.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6792 | 6.63633 | 103.312 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,061.0 | 21,061.0 | 0.49267 | 0.87767 | 62.1436 | 21,397.0 |
| Vendor | 0.34547 | 10.9938 | 5.12980 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,240.29 | 8,240.29 | 0.27264 | 1.20737 | 13.5161 | 8,620.42 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6088 | 9.05818 | 98.0881 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,860.9 | 19,860.9 | 0.70382 | 0.94805 | 1.61078 | 20,162.7 |
| Vendor | 0.32457 | 11.6227 | 5.30745 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,250.78 | 8,250.78 | 0.27264 | 1.20737 | 0.35142 | 8,617.75 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.14120 | 5.84323 | 66.6177 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,253.4 | 14,253.4 | 0.40218 | 0.62690 | 19.1986 | 14,469.5 |
| Vendor | 0.24676 | 8.11486 | 3.72386 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 5,889.07 | 5,889.07 | 0.19474 | 0.86241 | 4.17713 | 6,155.11 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.48577 | 1.06639 | 12.1577 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,359.82 | 2,359.82 | 0.06659 | 0.10379 | 3.17855 | 2,395.59 |
| Vendor | 0.04503 | 1.48096 | 0.67960 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 975.002 | 975.002 | 0.03224 | 0.14278 | 0.69157 | 1,019.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6792 | 6.63633 | 103.312 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,061.0 | 21,061.0 | 0.49267 | 0.87767 | 62.1436 | 21,397.0 |
| Vendor | 0.34547 | 10.9938 | 5.12980 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,240.29 | 8,240.29 | 0.27264 | 1.20737 | 13.5161 | 8,620.42 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6088 | 9.05818 | 98.0881 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,860.9 | 19,860.9 | 0.70382 | 0.94805 | 1.61078 | 20,162.7 |
| Vendor | 0.32457 | 11.6227 | 5.30745 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,250.78 | 8,250.78 | 0.27264 | 1.20737 | 0.35142 | 8,617.75 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.14120 | 5.84323 | 66.6177 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,253.4 | 14,253.4 | 0.40218 | 0.62690 | 19.1986 | 14,469.5 |
| Vendor | 0.24676 | 8.11486 | 3.72386 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 5,889.07 | 5,889.07 | 0.19474 | 0.86241 | 4.17713 | 6,155.11 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.48577 | 1.06639 | 12.1577 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,359.82 | 2,359.82 | 0.06659 | 0.10379 | 3.17855 | 2,395.59 |
| Vendor | 0.04503 | 1.48096 | 0.67960 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 975.002 | 975.002 | 0.03224 | 0.14278 | 0.69157 | 1,019.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.15. Building Construction (2031)

### 3.15.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.1865 | 5.82905 | 96.5017 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,718.2 | 20,718.2 | 0.49267 | 0.87767 | 56.3295 | 21,048.4 |
| Vendor | 0.28246 | 10.5426 | 4.90942 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,975.28 | 7,975.28 | 0.27264 | 1.14436 | 11.7140 | 8,334.83 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.9754 | 8.32128 | 91.1702 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,538.7 | 19,538.7 | 0.63344 | 0.94805 | 1.45828 | 19,838.5 |
| Vendor | 0.26156 | 11.1819 | 5.08706 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,986.04 | 7,986.04 | 0.27264 | 1.14436 | 0.30456 | 8,334.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.73902 | 5.31687 | 62.4038 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,022.3 | 14,022.3 | 0.40218 | 0.62690 | 17.3604 | 14,236.5 |
| Vendor | 0.19429 | 7.79256 | 3.56644 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.04501 | 0.46674 | 0.51175 | — | 5,699.85 | 5,699.85 | 0.19474 | 0.81740 | 3.62361 | 5,951.93 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.41237 | 0.97033 | 11.3887 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,321.55 | 2,321.55 | 0.06659 | 0.10379 | 2.87422 | 2,357.02 |
| Vendor | 0.03546 | 1.42214 | 0.65088 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.00821 | 0.08518 | 0.09339 | — | 943.676 | 943.676 | 0.03224 | 0.13533 | 0.59993 | 985.410 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.1865 | 5.82905 | 96.5017 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,718.2 | 20,718.2 | 0.49267 | 0.87767 | 56.3295 | 21,048.4 |
| Vendor | 0.28246 | 10.5426 | 4.90942 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,975.28 | 7,975.28 | 0.27264 | 1.14436 | 11.7140 | 8,334.83 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.9754 | 8.32128 | 91.1702 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,538.7 | 19,538.7 | 0.63344 | 0.94805 | 1.45828 | 19,838.5 |
| Vendor | 0.26156 | 11.1819 | 5.08706 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,986.04 | 7,986.04 | 0.27264 | 1.14436 | 0.30456 | 8,334.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.73902 | 5.31687 | 62.4038 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,022.3 | 14,022.3 | 0.40218 | 0.62690 | 17.3604 | 14,236.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.19429 | 7.79256 | 3.56644 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.04501 | 0.46674 | 0.51175 | — | 5,699.85 | 5,699.85 | 0.19474 | 0.81740 | 3.62361 | 5,951.93 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.41237 | 0.97033 | 11.3887 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,321.55 | 2,321.55 | 0.06659 | 0.10379 | 2.87422 | 2,357.02 |
| Vendor | 0.03546 | 1.42214 | 0.65088 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.00821 | 0.08518 | 0.09339 | — | 943.676 | 943.676 | 0.03224 | 0.13533 | 0.59993 | 985.410 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.16. Paving (2028)

### 3.16.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26552 | 2.56801 | 3.83984 | 0.00541 | 0.09902 | — | 0.09902 | 0.09109 | — | 0.09109 | — | 585.487 | 585.487 | 0.02375 | 0.00475 | — | 587.496 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04846 | 0.46866 | 0.70077 | 0.00099 | 0.01807 | — | 0.01807 | 0.01662 | — | 0.01662 | — | 96.9341 | 96.9341 | 0.00393 | 0.00079 | — | 97.2667 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02254 | 0.01783 | 0.19396 | 0.00000 | 0.00000 | 0.03820 | 0.03820 | 0.00000 | 0.00894 | 0.00894 | — | 37.6203 | 37.6203 | 0.00115 | 0.00173 | 0.05882 | 38.2223 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00411 | 0.00325 | 0.03540 | 0.00000 | 0.00000 | 0.00697 | 0.00697 | 0.00000 | 0.00163 | 0.00163 | — | 6.22846 | 6.22846 | 0.00019 | 0.00029 | 0.00974 | 6.32813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26552 | 2.56801 | 3.83984 | 0.00541 | 0.09902 | — | 0.09902 | 0.09109 | — | 0.09109 | — | 585.487 | 585.487 | 0.02375 | 0.00475 | — | 587.496 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04846 | 0.46866 | 0.70077 | 0.00099 | 0.01807 | — | 0.01807 | 0.01662 | — | 0.01662 | — | 96.9341 | 96.9341 | 0.00393 | 0.00079 | — | 97.2667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02254 | 0.01783 | 0.19396 | 0.00000 | 0.00000 | 0.03820 | 0.03820 | 0.00000 | 0.00894 | 0.00894 | — | 37.6203 | 37.6203 | 0.00115 | 0.00173 | 0.05882 | 38.2223 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00411 | 0.00325 | 0.03540 | 0.00000 | 0.00000 | 0.00697 | 0.00697 | 0.00000 | 0.00163 | 0.00163 | — | 6.22846 | 6.22846 | 0.00019 | 0.00029 | 0.00974 | 6.32813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.17. Paving (2029)

## 3.17.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34750 | 3.33651 | 5.12419 | 0.00721 | 0.12350 | — | 0.12350 | 0.11362 | — | 0.11362 | — | 780.440 | 780.440 | 0.03166 | 0.00633 | — | 783.119 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06342 | 0.60891 | 0.93516 | 0.00132 | 0.02254 | — | 0.02254 | 0.02074 | — | 0.02074 | — | 129.211 | 129.211 | 0.00524 | 0.00105 | — | 129.654 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02886 | 0.02182 | 0.24250 | 0.00000 | 0.00000 | 0.05093 | 0.05093 | 0.00000 | 0.01192 | 0.01192 | — | 49.2772 | 49.2772 | 0.00154 | 0.00230 | 0.07172 | 50.0732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00527 | 0.00398 | 0.04426 | 0.00000 | 0.00000 | 0.00930 | 0.00930 | 0.00000 | 0.00218 | 0.00218 | — | 8.15840 | 8.15840 | 0.00025 | 0.00038 | 0.01187 | 8.29018 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34750 | 3.33651 | 5.12419 | 0.00721 | 0.12350 | — | 0.12350 | 0.11362 | — | 0.11362 | — | 780.440 | 780.440 | 0.03166 | 0.00633 | — | 783.119 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06342 | 0.60891 | 0.93516 | 0.00132 | 0.02254 | — | 0.02254 | 0.02074 | — | 0.02074 | — | 129.211 | 129.211 | 0.00524 | 0.00105 | — | 129.654 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02886 | 0.02182 | 0.24250 | 0.00000 | 0.00000 | 0.05093 | 0.05093 | 0.00000 | 0.01192 | 0.01192 | — | 49.2772 | 49.2772 | 0.00154 | 0.00230 | 0.07172 | 50.0732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00527 | 0.00398 | 0.04426 | 0.00000 | 0.00000 | 0.00930 | 0.00930 | 0.00000 | 0.00218 | 0.00218 | — | 8.15840 | 8.15840 | 0.00025 | 0.00038 | 0.01187 | 8.29018 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.18. Architectural Coating (2029)

### 3.18.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02003 | 0.15541 | 0.21764 | 0.00034 | 0.00251 | — | 0.00251 | 0.00231 | — | 0.00231 | — | 26.1271 | 26.1271 | 0.00106 | 0.00021 | — | 26.2168 |
| Architectural Coatings | 74.1420 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00366 | 0.02836 | 0.03972 | 0.00006 | 0.00046 | — | 0.00046 | 0.00042 | — | 0.00042 | — | 4.32565 | 4.32565 | 0.00018 | 0.00004 | — | 4.34049 |
| Architectural Coatings | 13.5309 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.46253 | 1.47465 | 22.0103 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,285.62 | 4,285.62 | 0.11261 | 0.17553 | 13.6678 | 4,354.41 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39215 | 1.97309 | 20.8820 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,041.01 | 4,041.01 | 0.14076 | 0.18961 | 0.35456 | 4,101.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.46538 | 0.35177 | 3.91002 | 0.00000 | 0.00000 | 0.82121 | 0.82121 | 0.00000 | 0.19226 | 0.19226 | — | 794.528 | 794.528 | 0.02479 | 0.03711 | 1.15643 | 807.361 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08493 | 0.06420 | 0.71358 | 0.00000 | 0.00000 | 0.14987 | 0.14987 | 0.00000 | 0.03509 | 0.03509 | — | 131.543 | 131.543 | 0.00410 | 0.00614 | 0.19146 | 133.668 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02003 | 0.15541 | 0.21764 | 0.00034 | 0.00251 | — | 0.00251 | 0.00231 | — | 0.00231 | — | 26.1271 | 26.1271 | 0.00106 | 0.00021 | — | 26.2168 |
| Architectural Coatings | 74.1420 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00366 | 0.02836 | 0.03972 | 0.00006 | 0.00046 | — | 0.00046 | 0.00042 | — | 0.00042 | — | 4.32565 | 4.32565 | 0.00018 | 0.00004 | — | 4.34049 |
| Architectural Coatings | 13.5309 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.46253 | 1.47465 | 22.0103 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,285.62 | 4,285.62 | 0.11261 | 0.17553 | 13.6678 | 4,354.41 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39215 | 1.97309 | 20.8820 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,041.01 | 4,041.01 | 0.14076 | 0.18961 | 0.35456 | 4,101.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.46538 | 0.35177 | 3.91002 | 0.00000 | 0.00000 | 0.82121 | 0.82121 | 0.00000 | 0.19226 | 0.19226 | — | 794.528 | 794.528 | 0.02479 | 0.03711 | 1.15643 | 807.361 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08493 | 0.06420 | 0.71358 | 0.00000 | 0.00000 | 0.14987 | 0.14987 | 0.00000 | 0.03509 | 0.03509 | — | 131.543 | 131.543 | 0.00410 | 0.00614 | 0.19146 | 133.668 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19. Architectural Coating (2030)

## 3.19.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06989 | 0.55745 | 0.78651 | 0.00123 | 0.00779 | — | 0.00779 | 0.00717 | — | 0.00717 | — | 94.8438 | 94.8438 | 0.00385 | 0.00077 | — | 95.1693 |
| Architectural Coatings | 269.135 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01276 | 0.10173 | 0.14354 | 0.00022 | 0.00142 | — | 0.00142 | 0.00131 | — | 0.00131 | — | 15.7025 | 15.7025 | 0.00064 | 0.00013 | — | 15.7564 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 49.1172 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.33584 | 1.32727 | 20.6624 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,212.19 | 4,212.19 | 0.09853 | 0.17553 | 12.4287 | 4,279.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.32177 | 1.81164 | 19.6176 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 3,972.19 | 3,972.19 | 0.14076 | 0.18961 | 0.32216 | 4,032.53 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61932 | 1.16224 | 13.2505 | 0.00000 | 0.00000 | 2.98100 | 2.98100 | 0.00000 | 0.69790 | 0.69790 | — | 2,835.06 | 2,835.06 | 0.08000 | 0.12469 | 3.81868 | 2,878.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.29553 | 0.21211 | 2.41822 | 0.00000 | 0.00000 | 0.54403 | 0.54403 | 0.00000 | 0.12737 | 0.12737 | — | 469.377 | 469.377 | 0.01324 | 0.02064 | 0.63223 | 476.492 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06989 | 0.55745 | 0.78651 | 0.00123 | 0.00779 | — | 0.00779 | 0.00717 | — | 0.00717 | — | 94.8438 | 94.8438 | 0.00385 | 0.00077 | — | 95.1693 |
| Architectural Coatings | 269.135 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01276 | 0.10173 | 0.14354 | 0.00022 | 0.00142 | — | 0.00142 | 0.00131 | — | 0.00131 | — | 15.7025 | 15.7025 | 0.00064 | 0.00013 | — | 15.7564 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 49.1172 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.33584 | 1.32727 | 20.6624 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,212.19 | 4,212.19 | 0.09853 | 0.17553 | 12.4287 | 4,279.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.32177 | 1.81164 | 19.6176 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 3,972.19 | 3,972.19 | 0.14076 | 0.18961 | 0.32216 | 4,032.53 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61932 | 1.16224 | 13.2505 | 0.00000 | 0.00000 | 2.98100 | 2.98100 | 0.00000 | 0.69790 | 0.69790 | — | 2,835.06 | 2,835.06 | 0.08000 | 0.12469 | 3.81868 | 2,878.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.29553 | 0.21211 | 2.41822 | 0.00000 | 0.00000 | 0.54403 | 0.54403 | 0.00000 | 0.12737 | 0.12737 | — | 469.377 | 469.377 | 0.01324 | 0.02064 | 0.63223 | 476.492 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 2,755.42 | 2,755.42 | 0.23506 | 0.02849 | — | 2,769.79 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,755.42 | 2,755.42 | 0.23506 | 0.02849 | — | 2,769.79 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Total | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Total | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 9,464.95 | 9,464.95 | 0.83764 | 0.01782 | — | 9,491.20 |
| Total | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 9,464.95 | 9,464.95 | 0.83764 | 0.01782 | — | 9,491.20 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 22.6064 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | — | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 18.3560 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.83861 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 2.82581 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | — | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 22.6064 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | — | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 18.3560 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.83861 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landsca Equipment | 2.82581 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | — | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Total | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Total | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Total | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhous | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Total | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/2/2023 | 2/26/2024 | 5.00000 | 300.000 | — |
| Site Preparation | Site Preparation | 2/27/2024 | 11/5/2024 | 5.00000 | 180.000 | — |
| Grading | Grading | 11/6/2024 | 8/19/2026 | 5.00000 | 465.000 | — |
| Building Construction | Building Construction | 1/2/2023 | 12/31/2031 | 5.00000 | 2,348.00 | — |
| Paving | Paving | 6/17/2028 | 9/21/2029 | 5.00000 | 330.000 | — |
| Architectural Coating | Architectural Coating | 9/23/2029 | 12/29/2030 | 5.00000 | 330.000 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |

| | | | | |
|---|---|---|---|---|
| Grading | Hauling | 116.856 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 3,192.48 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 473.995 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 638.496 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 116.856 | 20.0000 | HHDT |

| | | | | |
|---|---|---|---|---|
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 3,192.48 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 473.995 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 638.496 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Apply dust suppressants to unpaved roads | 84% | 84% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 9,517,581 | 3,172,527 | 0.00000 | 0.00000 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Ton of Debris) | Material Exported (Ton of Debris) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Site Preparation | 0.00000 | 0.00000 | 135.000 | 0.00000 | 0.00000 |
| Grading | 365,330 | 184,200 | 699.000 | 0.00000 | 0.00000 |
| Paving | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Condo/Townhouse | — | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2025 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2026 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2027 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2028 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2029 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2030 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2031 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

| | | | | |
|---|---|---|---|---|
| 2023 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2024 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 4,434 | 4,434 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 9,517,581 | 3,172,527 | 0.00000 | 0.00000 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 15,703,685 | 386.830 | 0.0330 | 0.0040 | 178,382,036 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 15,706,910 | 386.830 | 0.0330 | 0.0040 | 0.00000 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 185,372,681 | 0.00000 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 185,372,681 | 0.00000 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 3,278.78 | 0.00000 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 3,278.78 | 0.00000 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 6.75000 | annual days of extreme heat |
| Extreme Precipitation | 4.10000 | annual days with precipitation above 20 mm |

| | | |
|---|---|---|
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 31.3300 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 0 | 0 | 0 | N/A |
| Wildfire | 0 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 0 | 0 | 0 | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 1 | 1 | 1 | 2 |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 13.6154 |
| AQ-PM | 2.92470 |
| AQ-DPM | 26.3846 |
| Drinking Water | 38.7161 |
| Lead Risk Housing | 56.6982 |
| Pesticides | 0.00000 |
| Toxic Releases | 0.53763 |
| Traffic | 27.0500 |
| Effect Indicators | — |

| | |
|---|---|
| CleanUp Sites | 82.9787 |
| Groundwater | 87.4813 |
| Haz Waste Facilities/Generators | 30.5890 |
| Impaired Water Bodies | 77.2995 |
| Solid Waste | 59.1753 |
| Sensitive Population | — |
| Asthma | 35.8549 |
| Cardio-vascular | 13.0982 |
| Low Birth Weights | 19.9256 |
| Socioeconomic Factor Indicators | — |
| Education | 24.1205 |
| Housing | 63.9670 |
| Linguistic | 24.7665 |
| Poverty | 26.6709 |
| Unemployment | 37.7147 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 64.9557295 |
| Employed | 60.78532016 |
| Median HI | 46.47760811 |
| Education | — |
| Bachelor's or higher | 81.58603875 |
| High school enrollment | 100 |
| Preschool enrollment | 1.873476197 |
| Transportation | — |

| | |
|---|---|
| Auto Access | 57.21801617 |
| Active commuting | 87.89939689 |
| Social | — |
| 2-parent households | 65.78981137 |
| Voting | 70.98678301 |
| Neighborhood | — |
| Alcohol availability | 40.65186706 |
| Park access | 81.35506224 |
| Retail density | 93.41716925 |
| Supermarket access | 64.09598358 |
| Tree canopy | 81.52187861 |
| Housing | — |
| Homeownership | 12.72937251 |
| Housing habitability | 27.37071731 |
| Low-inc homeowner severe housing cost burden | 19.88964455 |
| Low-inc renter severe housing cost burden | 39.67663288 |
| Uncrowded housing | 84.29359682 |
| Health Outcomes | — |
| Insured adults | 64.90440139 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 75.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 79.6 |

| | |
|---|---|
| Cognitively Disabled | 32.0 |
| Physically  Disabled | 36.0 |
| Heart Attack ER Admissions | 94.8 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 84.3 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 4.5 |
| SLR Inundation Area | 47.2 |
| Children | 88.7 |
| Elderly | 20.2 |
| English Speaking | 64.4 |
| Foreign-born | 44.0 |
| Outdoor Workers | 70.9 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 31.0 |
| Traffic Density | 1.4 |
| Traffic Access | 0.0 |
| Other Indices | — |
| Hardship | 20.0 |
| Other Decision Support | — |

| | |
|---|---|
| 2016 Voting | 74.8 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0000 |
| Healthy Places Index Score for Project Location (b) | 67.0000 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | 3CE serves Monterey County for electricity |
| Construction: Construction Phases | Revised to fit in planning years of 2023-2031 |
| Construction: Dust From Material Movement | Based on CalEEMod suggested estimates |
| Construction: On-Road Fugitive Dust | Site are located adjacent to existing roadways and development. Accessible primarily from paved roads. |

| | |
|---|---|
| Operations: Vehicle Data | Mobile emissions calculated separately |

## 8.2. Project Characteristics

### 8.2.1. Project Details

| Model Parameter | Default Value | New Value |
|---|---|---|
| Electric Utility | Pacific Gas & Electric Company | Central Coast Community Energy |

## 8.4. Construction

### 8.4.1. Construction Phases

| Phase Type | Phase Name | Model Parameter | Default Value | New Value |
|---|---|---|---|---|
| Building Construction | Building Construction | Start Date | 8/20/2026 | 1/2/2023 |
| Building Construction | Building Construction | End Date | 6/16/2044 | 12/31/2031 |
| Building Construction | Building Construction | Work Days per Phase | 4,650.00 | 2,348.00 |
| Paving | Paving | Start Date | 6/17/2044 | 6/17/2028 |
| Paving | Paving | End Date | 9/22/2045 | 9/21/2029 |
| Architectural Coating | Architectural Coating | Start Date | 9/23/2045 | 9/23/2029 |
| Architectural Coating | Architectural Coating | End Date | 12/29/2046 | 12/29/2030 |

### 8.4.4. Dust from Material Movement

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Site Preparation | Material Imported | Ton of Debris | — | 0.00000 |
| Site Preparation | Material Exported | Ton of Debris | — | 0.00000 |
| Site Preparation | Total Acres Graded | acres | 270.000 | 135.000 |
| Grading | Material Imported | Ton of Debris | — | 365,330 |
| Grading | Material Exported | Ton of Debris | — | 184,200 |
| Grading | Total Acres Graded | acres | 1,395.00 | 699.000 |

### 8.4.7. On-Road Fugitive Dust

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Demolition | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Hauling Trip Paved | % | 52.0000 | 100.0000 |

## 8.5. Operations

### 8.5.1. Mobile Sources

#### 8.5.1.1. Vehicle Data

| Land Use | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |

| | | | | |
|---|---|---|---|---|
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |

# Attachment 2. Mobile Emissions Calculations

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Unincorporated County Vehicle Emissions Comparison
Source: EMFAC2025 (v2.1.0) Emissions Inventory

| Year | Total County VMT (miles/day) | Nox | | | PM2.5 | | | PM10 | | | ROG | | | CO | | | SOX | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VM | tons/day | lbs/day | lbs/day/VM | tons/day | lbs/day | lbs/day/VMT |
| 2023 | 10,224,902 | 5.224514467 | 10449.029 | 0.00102192 | 0.156621261 | 313.2425217 | 3.06353E-05 | 0.353849 | 707.6971123 | 6.92131E-05 | 3.276405 | 6552.811 | 0.000641 | 52.63044 | 105260.9 | 0.010295 | 0.022923 | 45.84531 | 4.48369E-06 |
| 2031 | 10,222,014 | 2.315561101 | 4631.1222 | 0.000453054 | 0.131071089 | 262.1421772 | 2.56449E-05 | 0.325485 | 650.9704563 | 6.36832E-05 | 2.412968 | 4825.936 | 0.000472 | 38.98603 | 77972.07 | 0.007628 | 0.018964 | 37.92712 | 3.71034E-06 |

| Scenario | Unincorporated VMT | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|---|
| Existing (2023) | 3,267,663 | 3,339.29 | 100.11 | 226.17 | 2,094.14 | 33,639.15 | 14.65 |
| Future No Project (2031) | 3,968,469 | 1,797.93 | 101.77 | 252.72 | 1,873.56 | 30,270.92 | 14.72 |
| Future + Project (2031) | 4,277,358 | 1,937.87 | 109.69 | 272.40 | 2,019.39 | 32,627.08 | 15.87 |

Threshold Comparisons

| Scenario | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|
| Existing | 3,339.29 | 100.11 | 226.17 | 2,094.14 | 33,639.15 | 14.65 |
| Future +Project | 1,937.87 | 109.69 | 272.40 | 2,019.39 | 32,627.08 | 15.87 |
| **Net Change** | **(1,401.42)** | **9.59** | **46.23** | **(74.75)** | **(1,012.08)** | **1.22** |
| MBARD Threshold | 137 | -- | 82 | 137 | 550 | 150 |
| Significant? | No | No | No | No | No | No |

Threshold Comparisons

| Scenario | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|
| Future No Project | 1,797.93 | 101.77 | 252.72 | 1,873.56 | 30,270.92 | 14.72 |
| Future +Project | 1,937.87 | 109.69 | 272.40 | 2,019.39 | 32,627.08 | 15.87 |
| **Net Change** | **139.94** | **7.92** | **19.67** | **145.83** | **2,356.16** | **1.15** |
| MBARD Threshold | 137 | -- | 82 | 137 | 550 | 150 |
| Significant? | No | No | No | No | No | No |

Unincorporated County Vehicle Emissions Comparison
Source: EMFAC2025 (v2.1.0) Emissions Inventory

| Year | Total County VMT | CO2 | | | CH4 | | | N2O | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tons/day | MT/day | MT/VMT | tons/day | MT/day | MT/VMT | tons/day | MT/day | MT/VMT |
| 2023 | 10,224,902 | 5671.033307 | 5146.128228 | 0.000503294 | 0.300762 | 0.272924 | 2.66921E-08 | 0.514101 | 0.466515971 | 4.56255E-08 |
| 2031 | 10,222,014 | 4733.585236 | 4295.449397 | 0.000420216 | 0.194123 | 0.176155 | 1.72329E-08 | 0.466249 | 0.423093396 | 4.13904E-08 |

| Scenario | Unincorporated VMT | CO2 | CH4 | N2O |
|---|---|---|---|---|
| Existing (2023) | 3,267,663 | 1,644.59 | 0.09 | 0.15 |
| Future No Project (2031) | 3,968,469 | 1,667.61 | 0.07 | 0.16 |
| Future + Project (2031) | 4,277,358 | 1,797.41 | 0.07 | 0.18 |

Threshold Comparisons

| Scenario | CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Existing | 1,644.59 | 0.09 | 0.15 | 1,691.20 |
| Future +Project | 1,797.41 | 0.07 | 0.18 | 1,852.01 |
| **Net Change** | **152.82** | **(0.01)** | **0.03** | **160.81** |

| Scenario | CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Future No Project | 1,667.61 | 0.07 | 0.16 | 1,718.27 |
| Future +Project | 1,797.41 | 0.07 | 0.18 | 1,852.01 |
| **Net Change** | **129.80** | **0.01** | **0.01** | **133.74** |

Unincorporated County Vehicle Emissions Comparison
Source: EMFAC2025 (v2.1.0) Emissions Inventory

| Year | Total County VMT (miles/day) | Nox | | | PM2.5 | | | PM10 | | | ROG | | | CO | | | SOX | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VMT | tons/day | lbs/day | lbs/day/VM | tons/day | lbs/day | lbs/day/VM | tons/day | lbs/day | lbs/day/VMT |
| 2023 | 10,224,902 | 5.224514467 | 10449.029 | 0.00102192 | 0.156621261 | 313.2425217 | 3.06353E-05 | 0.353849 | 707.6971123 | 6.92131E-05 | 3.276405 | 6552.811 | 0.000641 | 52.63044 | 105260.9 | 0.010295 | 0.022923 | 45.84531 | 4.48369E-06 |
| 2031 | 10,222,014 | 2.315561101 | 4631.1222 | 0.000453054 | 0.131071089 | 262.1421772 | 2.56449E-05 | 0.325485 | 650.9704563 | 6.36832E-05 | 2.412968 | 4825.936 | 0.000472 | 38.98603 | 77972.07 | 0.007628 | 0.018964 | 37.92712 | 3.71034E-06 |

| Scenario | Unincorporated VMT | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|---|
| Existing (2023) | 3,267,663 | 3,339.29 | 100.11 | 226.17 | 2,094.14 | 33,639.15 | 14.65 |
| Future No Project (2031) | 3,968,469 | 1,797.93 | 101.77 | 252.72 | 1,873.56 | 30,270.92 | 14.72 |
| Future + Project (2031) | 4,174,693 | 1,891.36 | 107.06 | 265.86 | 1,970.92 | 31,843.97 | 15.49 |

Threshold Comparisons

| Scenario | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|
| Existing | 3,339.29 | 100.11 | 226.17 | 2,094.14 | 33,639.15 | 14.65 |
| Future +Project | 1,891.36 | 107.06 | 265.86 | 1,970.92 | 31,843.97 | 15.49 |
| **Net Change** | **(1,447.93)** | **6.95** | **39.69** | **(123.22)** | **(1,795.19)** | **0.84** |
| MBARD Threshold | 137 | -- | 82 | 137 | 550 | 150 |
| Significant? | No | No | No | No | No | No |

Threshold Comparisons

| Scenario | NOX | PM2.5 | PM10 | ROG | CO | SOx |
|---|---|---|---|---|---|---|
| Future No Project | 1,797.93 | 101.77 | 252.72 | 1,873.56 | 30,270.92 | 14.72 |
| Future +Project | 1,891.36 | 107.06 | 265.86 | 1,970.92 | 31,843.97 | 15.49 |
| **Net Change** | **93.43** | **5.29** | **13.13** | **97.36** | **1,573.05** | **0.77** |
| MBARD Threshold | 137 | -- | 82 | 137 | 550 | 150 |
| Significant? | No | No | No | No | No | No |

Unincorporated County Vehicle Emissions Comparison
Source: EMFAC2025 (v2.1.0) Emissions Inventory

| Year | Total County VMT | CO2 | | | CH4 | | | N2O | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tons/day | MT/day | MT/VMT | tons/day | MT/day | MT/VMT | tons/day | MT/day | MT/VMT |
| 2023 | 10,224,902 | 5671.033307 | 5146.128228 | 0.000503294 | 0.300762 | 0.272924 | 2.66921E-08 | 0.514101 | 0.466515971 | 4.56255E-08 |
| 2031 | 10,222,014 | 4733.585236 | 4295.449397 | 0.000420216 | 0.194123 | 0.176155 | 1.72329E-08 | 0.466249 | 0.423093396 | 4.13904E-08 |

| Scenario | Unincorporated VMT | CO2 | CH4 | N2O |
|---|---|---|---|---|
| Existing (2023) | 3,267,663 | 1,644.59 | 0.09 | 0.15 |
| Future No Project (2031) | 3,968,469 | 1,667.61 | 0.07 | 0.16 |
| Future + Project (2031) | 4,174,693 | 1,754.27 | 0.07 | 0.17 |

Threshold Comparisons

| Scenario | CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Existing | 1,644.59 | 0.09 | 0.15 | 1,691.20 |
| Future +Project | 1,754.27 | 0.07 | 0.17 | 1,807.56 |
| **Net Change** | **109.68** | **(0.02)** | **0.02** | **116.36** |

| Scenario | CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Future No Project | 1,667.61 | 0.07 | 0.16 | 1,718.27 |
| Future +Project | 1,754.27 | 0.07 | 0.17 | 1,807.56 |
| **Net Change** | **86.66** | **0.00** | **0.01** | **89.29** |

# Biological Resources Technical Report

## County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update

**July 2026**

Prepared for:

**County of Monterey**
**168 West Alisal Street, 3rd Floor**
**Salinas, California 93901**

Prepared by:

**60 W. Alisal Street, Suite 200, 2nd Floor**
**Salinas, California 93901**

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## Appendices

Appendix A. Figures

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## *Acronyms and Abbreviations*

| | |
|---|---|
| AMSL | above mean sea level |
| BMP | best management practice |
| CCE | California candidate endangered species |
| CDFW | California Department of Fish and Wildlife |
| CE | California endangered |
| CEQA | California Environmental Quality Act |
| CFGC | California Fish and Game Code |
| CFP | California fully protected |
| CNPS | California Native Plant Society |
| County | County of Monterey |
| CRPR | California Rare Plant Rank |
| CT | California threatened |
| CWA | Clean Water Act |
| DPS | distinct population segment |
| FC | federal candidate for listing |
| FE | federally endangered |
| FT | federally threatened |
| GIS | geographic information system |
| IPaC | Information for Planning and Consultation |
| MBTA | Migratory Bird Treaty Act |
| NCCP | Natural Community Conservation Planning |
| NPDES | National Pollutant Discharge Elimination System |
| PEIR | Program Environmental Impact Report |
| Porter-Cologne Act | Porter-Cologne Water Quality Control Act |
| project | County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update |
| RWQCB | Regional Water Quality Control Board |
| SR- | State Route |
| SSC | species of special concern |
| UMC | Unincorporated Monterey County |
| USACE | U.S. Army Corps of Engineers |
| USFWS | U.S. Fish and Wildlife Service |
| WL | California Department of Fish and Wildlife Watch List |

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## *Executive Summary*

At the request of the County of Monterey (County), Harris & Associates has prepared this Biological Resources Technical Report for the County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update (project) Program Environmental Impact Report (PEIR).

The project is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County's Regional Housing Needs Allocation. Along with facilitating the County's Regional Housing Needs Allocation, the project must identify and analyze significant disparities in access to opportunity (AB 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

This report presents the documented biological resources that occur in the project area; identifies potential impacts to sensitive biological resources; documents potential jurisdictional aquatic resources; and recommends avoidance, minimization, or mitigation measures consistent with federal, state, and local rules and regulations.

The biological resources impacts analysis was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and the CEQA Guidelines (as amended). This report is a technical study in support of the PEIR.

The biological resources documented as present or with potential to occur in the project area were identified through a review of existing maps, literature and other biological studies conducted in the area, and sensitive species occurrence databases. No biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted as a part of this project. The results of this review provide information on the potential constraints to project development due to the presence of sensitive biological resources.

Six vegetation communities and two land cover types are documented in the project area. The vegetation communities include fresh water, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, and coastal scrub, all of which are considered sensitive. The two land cover types include agriculture and urban/developed land, which are not considered sensitive.

A total of 35 sensitive plant species and 26 sensitive wildlife species have been documented in the project area. Critical habitat for two sensitive plant species and five sensitive wildlife species occurs in the project area.

Project implementation would result in potentially significant direct and indirect impacts on sensitive plant and wildlife species (including nesting birds and raptors, sensitive roosting bats, and critical

habitat), sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages. Impacts resulting from conflicts with local policies, ordinances, or regional conservation plans protecting biological resources would be less than significant.

Mitigation Measures MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, (PEIR Section 4.13) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 are proposed to reduce direct and indirect project impacts on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages to below a level of significance. Implementation of the project would not result in cumulative impacts to biological resources because impacts would be reduced to below a level of significance with implementation of these mitigation measures.

# Section 1 Introduction

This Biological Resources Technical Report for the County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update (project) Program Environmental Impact Report (PEIR) documents the biological resources in Monterey County and addresses at a programmatic level the potential biological resources impacts associated with the construction and operation of the project for the County of Monterey (County).

## 1.1 Project Description

The project is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County's Regional Housing Needs Allocation of 3,326 housing units distributed across four income levels (1,070 extremely low/very low income, 700 low income, 420 moderate income, and 1,136 above moderate income housing units). Along with facilitating the County's Regional Housing Needs Allocation, the project must identify and analyze significant disparities in access to opportunity (AB 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

The County includes the capacity for at least 5,897 units, comprising opportunity sites (4,434 units), pipeline sites (1,117 units), and accessory dwelling units (346 units). Opportunity sites are sites for which the County has a reasonable expectation that housing development could occur, although no proposals or entitlements have been submitted.

### 1.1.1 Project Location

The project area is in Monterey County, located just south of the Bay Area. It is bounded by the Pacific Ocean to the west and San Benito County to the east and accessible by U.S. Route 101 from the north and south. Monterey County is one of the largest counties in the State of California, covering more than 3,300 square miles, and is composed of diverse natural habitats and residential communities. Monterey County is on the north-central coast of California and is bordered by the following counties: Santa Cruz to the north; San Benito, Fresno, and King to the east; and San Luis Obispo to the south (Appendix A, Figures; Figure 1, Regional Location). The project area encompasses Unincorporated Monterey County (UMC), the geographic area overseen by the County and covered by the 6th Cycle Housing Element Updates (2023–2031). Regional access to Monterey County is provided through U.S. Route 101 traveling north–south and State Route (SR-) 198 and SR-146 running east–west. SR-1 also provides regional access along the Pacific coastline and SR-218, SR-68, and SR-183 are other major roadways serving Monterey County.

The project area includes 56 opportunity sites in nine planning areas, including North County Inland Area Plan, North County Coastal Land Use Plan, Greater Salinas Valley Area Plan, Greater Monterey Peninsula Area Plan, Fort Ord Master Plan, Toro Area Plan, Carmel Valley Master Plan, Carmel Area Land Use Plan, and Central Salinas Valley Area Plan (Figure 2, Project Location – Index, and Figures 2a through 2i, Project Location).

## 1.2 Purpose

At the request of the County, Harris & Associates has prepared this Biological Resources Technical Report for the project. The purpose of this Biological Resources Technical Report is to present documented biological resources that occur in the project area; identify potential impacts to sensitive biological resources; document potential jurisdictional aquatic resources; and recommend avoidance, minimization, or mitigation measures consistent with federal, state, and local rules and regulations.

The term "biological resources" refers to plant species, wildlife species, and vegetation communities on and adjacent to the survey area. For this Biological Resources Technical Report, sensitive biological resources are those defined as follows: (1) species designated as endangered, threatened, rare, protected, sensitive, or species of special concern according to the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), or applicable regional plans, policies, or regulations needs due to limited distribution, limited numbers, or significant population declines associated with natural or human-made causes; (2) species and habitat types recognized by local and regional resource agencies as special status; (3) habitats or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; (4) wildlife corridors and habitat linkages; or (5) biological resources that may or may not be considered special status but are regulated under local, state, or federal laws.

The project objectives are as follows:

- Present a comprehensive assessment of local housing conditions and lays out a series of goals, policies, and programs to assist the County in meeting the housing needs of current future residents at all income levels in UMC.
- Addresses numerous requirements resulting from a slate of new state housing laws designed to address factors contributing to the statewide housing shortage.
- Provide a detailed work program for the preservation, improvement, and development of housing, including how and where UMC can accommodate its fair share of the County's need for new housing.
- Identify ways in which the housing needs of all economic segments of the community, including residents and the local workforce, can be met.
- Make necessary amendments to the applicable General Plan elements, area plans, master plans, Local Coastal Programs, and Zoning Ordinance in a manner that

affirmatively furthers fair housing and perpetuates the overall goal of providing safe and decent housing for all economic segments of the community.

## 1.3 Environmental Setting

The following is a description of the existing conditions in the project area.

### 1.3.1 Land Use

UMC is largely undeveloped open space, with the majority of urban and suburban development following SR-1 and U.S. Route 101. Other uses include residential, commercial, agricultural, industrial, military, civic, and public/quasi-public (County of Monterey 2010a).

### 1.3.2 Topography and Soils

The Monterey County is bounded by the Pacific Ocean to the west and San Benito County to the east. The general topography varies throughout the Monterey County and includes coastal bluffs, mountain ranges, and valleys (Figure 3, USGS Topographic Map – Index, and Figures 3a through 3i, USGS Topographic Map). The Monterey County lies within several quadrangles of the California Geological Survey Map, including but not limited to the Salinas, Monterey, and Seaside Quadrangles. Major faults in Monterey County are San Andreas, Palo Colorado-San Gregorio, and Monterey Bay – Tularcitos (OES 2022). There are also other lesser known faults such as Reliz, Rinconada, Garrapata, Rocky Point, and more. Development in UMC is further limited by soils in the area that are susceptible to liquefication (OES 2022).

A total of 39 soil types are present on the opportunity sites in the project area, including Alviso silty clay loam, Antioch very fine sandy loam, Arnold loamy sand, Arnol-Santa Ynex complex, Arroyo Seco gravelly loam, Baywood sand, Chamise channery loam, Chamise shaly loam, Chualar loam, Clear Lake clay, Corducci-Typic Xerofluvents, Cropley silty clay, Diablo clay, Dibble silt loam, Elder sandy loam, Elder very fine sandy loam, Elkhorn fine sandy loam (and thin surface variant), Garey sandy loam, Lockwood channery loam, Lockwood shaly loam, Metz fine sandy loam, Mocho silt loam, Narlon loamy fine sand, Oceano loamy sand, Pacheco clay loam, Pico fine sandy loam, Placentia sandy loam, Rincon clay loam, rock outcrop/Xerorthent association, Salinas clay loam, Santa Lucia channery clay loam, Santa Lucia shaly clay loam, Santa Lucia-Reliz association, Santa Ynez fine sandy loam, Tijunga fine sand, and Xerorthents (dissected, loamy, and sandy) (Figure 4, Soils – Index, and Figures 4a through 4i, Soils; USDA 2026a; USDA 2026b).

### 1.3.3 Hydrology

Seven major watersheds span Monterey County under the responsibility of three different Regional Water Management Groups, based on watershed and jurisdictional boundaries. The seven major watersheds include Bolsa Nueva, Carmel River, Estero Bay, Estrella River, Pajaro River, Salinas River, and Santa Lucia. These watersheds drain west into the Pacific Ocean, with

the Monterey Bay National Marine Sanctuary encompassing approximately 276 miles of shoreline, approximately 6,094 square statute miles, and extending an average of 30 miles offshore (NOAA 2026).

Important surface waters of these three Regional Water Management Groups are described in Section 4.10, Hydrology and Water Quality, Environmental Setting, Surface Water. They include the Salinas River, San Antonio and Nacimiento Rivers and Reservoirs, Waterways originating in the Santa Lucia Range along the Big Sur coast, Elkhorn Slough and Moro Cojo Slough, and the Monterey Bay and the coastal waters of the Monterey Bay National Marine Sanctuary in the Greater Monterey County Integrated Regional Water Management (IRWM) region; the Carmel River, and the Los Padres Reservoir in the Monterey Peninsula IRWM region; Pajaro River in the Pajaro River Watershed IRWM region. Figure 5, Hydrology – Index, and Figures 5a through 5i, Hydrology, identify the major hydrologic features documented in the vicinity of the project area (USFWS 2026a; USGS 2026). Of the major hydrologic features documented in the project area, Big Sur River, Elkhorn Slough, Pajaro River, and Salinas River are defined as traditional navigable waters by the U.S. Army Corps of Engineers (USACE) (USACE 2026). Many of the other major rivers and streams, as well as numerous creeks and drainages, are tributary to these traditional navigable waters or have direct connections to the Pacific Ocean.

### 1.3.4 Climate

On a regional level, Monterey County has a Mediterranean climate, which is characterized by mild, wet winters and warm, dry summers, largely defined by the Pacific Ocean and the Santa Lucia Range. Habitats in this region include both mesic (moist) habitats, such as redwood forest, and xeric (dry) habitats, such as coastal scrub. Generalized climate in the region is characterized by warm, dry summers and cold, moist winters, which pushes the growing season to the wet months of the year (late winter to early spring). Vegetation often goes dormant (senescent) during the later summer months until initial rains start in the fall. The rainy season in Monterey County typically lasts from November through April and has an annual winter precipitation average of approximately 19 inches (Western Regional Climate Center 2026).

# Section 2 Methods

Biological resources documented as present or with potential to occur in the project area were identified through a review of existing maps, literature and other biological studies conducted in the area, and sensitive species occurrence databases. Due to the programmatic nature of this project, no biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted for the project area. The results of this review provide information on the potential constraints to project development due to the presence of sensitive biological resources.

## 2.1 Literature Review

The following documents and databases were reviewed before the biological resources surveys were performed:

- Calflora Database (Calflora 2026)
- Consortium of California Herbaria database (CCH 2026)
- The CNPS Rare Plant Program Inventory of Rare Plants (CNPS 2026)
- California Natural Diversity Database (CDFW 2026a)
- CDFW Biogeographic Information and Observation System (CDFW 2026b)
- U.S. Department of Agriculture Soil Survey (USDA 2019)
- USFWS Information for Planning and Consultation (IPaC) (USFWS 2026b)
- USFWS NWI Wetlands Mapper (USFWS 2026a)
- USGS National Hydrography Dataset (NHD) (USGS 2026)

## 2.2 Vegetation Mapping

Vegetation community boundaries for the project area were obtained in geographic information system (GIS) format from the U.S Forest Service geospatial dataset (U.S. Forest Service 2026). It is important to note that the U.S. Forest Service dataset is not updated on an annual basis, and there may be discrepancies in the boundaries or designations of the vegetation communities and land cover types due to recent development or natural processes changing the conditions of the project area. Vegetation community types are in accordance with the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986).

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# Section 3 Results

The results presented in this section provide data from the literature and database review conducted for the project area.

## 3.1 Vegetation Communities and Land Cover Types

The project area consists of six vegetation communities and two land cover types, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, coastal scrub, agricultural land, and urban/developed land. All six vegetation communities documented in the project area as described below are considered sensitive (U.S. Forest Service 2026; Holland 1986). The two land cover types, agricultural land and urban/developed land, are not considered sensitive biological resources.

Table 1, Vegetation Communities and Land Cover Types in the Project Area, presents the vegetation communities and land cover types for the project area and identify the specific opportunity sites (56 total opportunity sites: 1 through 6, 8 through 56, and 64) where each occurs. Figure 6, Vegetation and Land Cover – Index, and Figures 6a through 6i, Vegetation and Land Cover, present the vegetation community and land cover type boundaries in the project area. The sensitive vegetation communities were designated as sensitive because of the general scarcity of the community; because impacts to the habitat are often regulated by the USFWS, CDFW, USACE, or Regional Water Quality Control Board (RWQCB); or because of the species the vegetation community supports and the functions that it provides.

**Table 1. Vegetation Communities and Land Cover Types in the Project Area**

| Vegetation Community and Land Cover Type | Opportunity Site |
|---|---|
| **Wetlands and Waters** | |
| Freshwater[1] | 11, 12, 13, 14, 15 |
| Freshwater Marsh[1] | 24, 56 |
| **Woodland and Forest** | |
| Mixed Conifer Forest[1] | 8, 16, 22, 37, 40, 43, 45, 46, 52 |
| Oak Woodland[1] | 8, 9, 10, 20, 21, 22, 31, 40, 46, 48, 52, 53, 56 |
| **Grassland** | |
| Annual Grassland[1] | 1, 4, 8, 9, 10, 11, 12, 14, 15, 18, 19, 20, 21, 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, 52 |
| **Scrub** | |
| Coastal Scrub [1] | 22, 31, 44, 46, 47, 52, 53 |
| **Developed** | |
| Agricultural Land | 1, 2, 3, 4, 14, 15, 19, 20, 21, 22, 24, 25, 26, 37, 48, 50 |
| Urban/Developed Land | 1, 2, 3, 4, 5, 6, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 64 |

**Sources:** U.S. Forest Service 2026; Holland 1986.

**Notes:**

[1] Considered a sensitive vegetation community.

### 3.1.1 Vegetation Communities

#### 3.1.1.1 Wetlands and Waters

#### Freshwater

Freshwater includes year-round bodies of freshwater in the form of lakes, streams, ponds, or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10 percent vegetated cover.

Freshwater occurs on five of the opportunity sites in the project area, including Sites 11, 12, 13, 14, and 15 (Table 1; Figure 6 series). The fresh water in the project area may fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

#### Freshwater Marsh

Freshwater marsh documented in the project area generally corresponds to the coastal and valley freshwater marsh natural community type of Holland (Holland 1986). Coastal and valley freshwater marsh is dominated by fresh water emergent monocots often forming closed canopies. Dominant species include cattails (*Typha* spp.) and tules (*Schoenoplectus* spp.). Coastal and valley freshwater marsh occurs along the coast and in coastal valleys around river mouths and the margins or lakes and springs, although it has been greatly reduced throughout its range due to urban development (Holland 1986).

Freshwater marsh occurs on two of the opportunity sites in the project area, including Sites 24 and 56 (Table 1; Figure 6 series). The freshwater marsh in the project area may fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

#### 3.1.1.2 Woodland and Forest

#### Mixed Conifer Forest

Mixed conifer forest documented in the project area generally corresponds to the coast range mixed coniferous forest natural community type of Holland (Holland 1986). Coast range mixed coniferous forest is a closed forest dominated by Ponderosa pine (*Pinus ponderosa*) and Douglas fir (*Pseudotsuga menziesii*), as well as sugar pine (*Pinus lambertiana*), California incense cedar (*Calocedrus decurrens*), and other broad-leaved trees. This community occurs primarily on mesic, well-drained sites with course but relatively moist soils. Coast range mixed coniferous forest is present between approximately 3,500 and 6,000 feet above mean sea level (AMSL), primarily scattered on the summits of the Santa Lucia Range in Monterey County (Holland 1986).

Mixed conifer forest occurs in nine of the opportunity sites in the project area, including Sites 8, 16, 22, 37, 40, 43, 45, 46, and 52 (Table 1; Figure 6 series).

### Oak Woodland

Oak woodland documented in the project area generally corresponds to the interior live oak woodland natural community type of Holland (Holland 1986). Interior live oak woodland is a broad-leaved evergreen woodland dominated by interior live oak (*Quercus wislizeni*), with blue oak (*Quercus douglasii*), California buckeye (*Aesculus californica*), and California bay (*Umbellularia californica*) also being important component species. The dense canopy and persistent leaf litter of this community limits the herbaceous understory. Interior live oak woodland typically occurs on sloping to steep, north-facing hillsides below approximately 8,500 feet AMSL. This community is scattered in the South California Coast Ranges, especially in Santa Cruz and Monterey Counties (Holland 1986).

Oak woodland occurs on 13 of the opportunity sites in the project area, including Sites 8, 9, 10, 20, 21, 22, 31, 40, 46, 48, 52, 53, and 56(Table 1; Figure 6 series).

#### 3.1.1.3 Grassland

### Annual Grassland

Annual grassland documented in the project area generally corresponds to the non-native annual grassland natural community type of Holland (Holland 1986). Non-native annual grassland is a dense to sparse cover of annual grasses sometimes associated with numerous species of native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oat (*Avena* sp.), red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*Bromus diandrus*), barley (*Hordeum* sp.), and mustard (*Brassica* sp.). The majority of species and biomass in the non-native annual grassland community originated from the Mediterranean region, an area with a history of agriculture and a climate similar to California (Holland 1986).

Annual grassland occurs on 24 of the opportunity sites in the project area, including Sites 1, 4, 8, 9, 10, 11, 12, 14, 15, 18, 19, 20, 21, 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, and 52 (Table 1; Figure 6 series).

#### 3.1.1.4 Scrub

### Coastal Scrub

Coastal scrub documented in the project area generally corresponds to both the northern and central coastal scrub natural community types of Holland (Holland 1986). Coastal scrub is typified by densely growing low- to moderately sized woody shrubs with small leathery evergreen leaves and small diameter flexible branches. These shrubs are often relatively short-lived with a shallow root structure and typically occur in dry, often rocky soils. The understory herbaceous cover can vary from dense to non-existent, depending on site conditions. Characteristic species include sagebrush (*Artemisia* sp.), coyote brush (*Baccharis pilularis*), ceanothus (*Ceanothus* sp.), California goldenbush (*Ericameria ericoides*), bush monkey flower

(*Mimulus aurantiacus*), black sage (*Salvia mellifera*), lupin (*Lupinus* sp.), and Pacific poison oak (*Toxicodendron diversilobum*). In general, coastal scrub occurs on moderate to steep south-facing slopes in proximity to the Pacific Coast (Holland 1986).

Coastal scrub occurs on seven of the opportunity sites in the project area, including Sites 22, 31, 44, 46, 47, 52, and 53 (Table 1; Figure 6 series).

### 3.1.2 Land Cover Types

#### Agricultural Land

Agricultural land is not considered a vegetation community and is therefore not included as a natural community type described in Holland (Holland 1986). Agricultural land includes areas occupied by dairies and livestock feed yards or areas that have been tilled for use as croplands or groves and orchards.

Agricultural land occurs on 16 of the opportunity sites in the project area, including Sites 1, 2, 3, 4, 14, 15, 19, 20, 21, 22, 24, 25, 26, 37, 48, and 50, 59, and is not considered sensitive (Table 1; Figure 6 series).

#### Urban/Developed Land

Urban/developed land is not considered a vegetation community and is therefore not included as a natural community type described in Holland (Holland 1986). Urban/developed land represents areas that have been constructed on or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Urban/developed land occupies the greatest amount of the project area, 51 of the opportunity sites, including 1, 2, 3, 4, 5, 6, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, and 64, and is not considered sensitive (Table 1; Figure 6 series).

## 3.2 Jurisdictional Wetlands and Waters

Aquatic resources delineations were not conducted as part of the project. However, wetlands and waters potentially subject to the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA, RWQCB pursuant to Section 401 of the CWA or the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the CDFW pursuant to Section 1600 et seq. of the California Fish and Game Code (CFGC) occur in the project area. Aquatic vegetation communities

(i.e., freshwater and freshwater marsh) occur in the project area and may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW (Figure 6).

As described in Section 1.3.3, Hydrology, numerous major and minor aquatic features occur across the seven major watersheds in which the project area is located (Figure 5). This includes features that are defined by the USACE as traditional navigable waters, are tributaries, or have direct connections to the Pacific Ocean. Most of the rivers, streams, creeks, sloughs, and bays that occur in the project area are documented aquatic resources under the jurisdiction of the USACE, RWQCB, and CDFW, pursuant to Sections 404 and 401 of the CWA and Section 1602 of the CFGC, respectively. The wetlands and waters vegetation communities documented in the project area and described in Section 3.1, Vegetation Communities and Land Cover Types, including freshwater and freshwater marsh, may also be under federal and state jurisdiction. In addition, wetland waters and non-wetland waters, including non-vegetated stream channels, erosional features, gullies, and concrete-lined channels, that occur in the project area may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW. However, only these agencies can make a final determination of jurisdictional boundaries.

## 3.3 Sensitive Plant and Wildlife Species

Sensitive species are those recognized by federal, state, or local agencies as being potentially vulnerable to impacts because of rarity, local or regional reductions in population numbers, isolation/restricted genetic flow, or other factors. Sensitive plant species include those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or those species included in the California Rare Plant Rank (CRPR) inventory, maintained by the CNPS. Sensitive wildlife species include those listed as threatened or endangered, proposed for listing, candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or the CDFW Watch List (WL).

Based on the database search results, which included a 1-mile buffer in addition to the project area, described previously in Section 2, Methods, 35 sensitive plant species and 26 sensitive wildlife species have been documented in and have the potential to occur in the project area (Figure 7, Historical Species with Potential to Occur – Index, and Figures 7a through 7j, Historical Species with Potential to Occur). These species are listed in Table 2, Sensitive Plant Species Documented in the Project Area, and Table 3, Sensitive Wildlife Species Documented in the Project Area (Calflora 2026; CDFW 2026a; CDFW 2026b; CNPS 2026; USFWS 2026b).

### 3.3.1 Sensitive Plant Species

A total of 35 sensitive plant species have been documented within a 1-mile buffer of the project area and are listed in Table 2 and discussed in more detail in the following sections.

**Table 2. Sensitive Plant Species Documented in the Project Area**

| Scientific Name | Common Name | Federal/State/CRPR |
|---|---|---|
| *Allium hickmanii* | Hickman's onion | None/None/1B.2 |
| *Arctostaphylos hookeri* ssp. *hookeri* | Hooker's manzanita | None/None/1B.2 |
| *Arctostaphylos montereyensis* | Toro manzanita | None/None/1B.2 |
| *Arctostaphylos pajaroensis* | Pajaro manzanita | None/None/1B.1 |
| *Arctostaphylos pumila* | Sandmat manzanita | None/None/1B.2 |
| *Astragalus tener* var. *tener* | Alkali milk-vetch | None/None/1B.2 |
| *Castilleja ambigua* var. *insalutata* | Pink Johnny-nip | None/None/1B.1 |
| *Centromadia parryi* ssp. *congdonii* | Congdon's tarplant | None/None/1B.1 |
| *Chorizanthe minutiflora* | Fort Ord spineflower | None/None/1B.2 |
| *Chorizanthe pungens* var. *pungens* | Monterey spineflower | FT/None/1B.2 |
| *Clarkia jolonensis* | Jolon clarkia | None/None/1B.2 |
| *Cordylanthus rigidus* ssp. *littoralis* | Seaside bird's-beak | None/CE/1B.1 |
| *Delphinium californicum* ssp. *interius* | Hospital Canyon larkspur | None/None/1B.2 |
| *Delphinium umbraculorum* | Umbrella larkspur | None/None/1B.3 |
| *Ericameria fasciculata* | Eastwood's goldenbush | None/None/1B.1 |
| *Eryngium montereyense* | Fort Ord button-celery | None/None/1B.1 |
| *Erysimum ammophilum* | Sand-loving wallflower | None/None/1B.2 |
| *Fritillaria liliacea* | Fragrant fritillary | None/None/1B.2 |
| *Gilia tenuiflora* ssp. *arenaria* | Monterey gilia | FE/CT/1B.2 |
| *Holocarpha macradenia* | Santa Cruz tarplant | FT/CE/1B.1 |
| *Horkelia cuneata* var. *sericea* | Kellogg's horkelia | None/None/1B.1 |
| *Lupinus tidestromii* | Tidestrom's lupine | FE/CE/1B.1 |
| *Malacothamnus involucratus* | Carmel Valley bushmallow | None/None/1B.2 |
| *Malacothrix saxatilis* var. *arachnoidea* | Carmel Valley malacothrix | None/None/1B.2 |
| *Microseris paludosa* | Marsh microseris | None/None/1B.2 |
| *Monardella sinuata* ssp. *nigrescens* | Northern curly-leaved monardella | None/None/1B.2 |
| *Monolopia gracilens* | Woodland woollythreads | None/None/1B.2 |
| *Pinus radiata* | Monterey pine | None/None/1B.1 |
| *Piperia yadonii* | Yadon's rein orchid | FE/None/1B.1 |
| *Plagiobothrys chorisianus var. chorisianus* | Choris' popcornflower | None/None/1B.2 |
| *Rosa pinetorum* | Pine rose | None/None/1B.2 |
| *Stebbinsoseris decipiens* | Santa Cruz microseris | None/None/1B.2 |
| *Trifolium buckwestiorum* | Santa Cruz clover | None/None/1B.1 |
| *Trifolium polyodon* | Pacific Grove clover | None/Rare/1B.1 |
| *Trifolium trichocalyx* | Monterey clover | FE/CE/1B.1 |

**Sources:** Calflora 2026; CDFW 2026a, 2026b; CNPS 2026; USFWS 2026b.

**Notes:** CE = California endangered; CRPR = California Rare Plant Rank; CT = California threatened; FE = federally endangered; FT = federally threatened.

CRPR: 1B = rare, threatened, or endangered in California and elsewhere; .1 = seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat); .2 = moderately threatened in California (20–80 percent occurrences threatened/moderate degree and immediacy of threat)

### Hickman's Onion (*Allium hickmanii*)

- **Status:** CRPR 1B.2
- **Distribution:** Central California coast, primarily northern and southern Monterey County and northern San Luis Obispo County.
- **Habitat:** Closed-cone coniferous forest, coastal prairie, coastal scrub, maritime chaparral, and valley and foothill grassland at elevations between 15 and 655 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest, chaparral, coastal scrub, and annual grassland.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1976, 1985, 1988, 1994, 2000, 2009, and 2010.

### Hooker's Manzanita (*Arctostaphylos hookeri* ssp. *hookeri*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Monterey Bay area in Central California.
- **Habitat:** Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub with sandy soil at elevations between 150 and 1,760 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest, chaparral, and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the northern, western, and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1975, 1976, 2001, 2010, 2012, and 2014.

### Toro Manzanita (*Arctostaphylos montereyensis*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal and slightly inland in the Monterey Bay area in Central California.
- **Habitat:** Cismontane woodland, coastal scrub, and maritime chaparral with sandy soil at elevations between 100 and 2,395 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest, chaparral, and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1950 (recorded as extirpated), 1970, 1977, 1992, 1995, 2009, 2012, and 2017.

### Pajaro Manzanita (*Arctostaphylos pajaroensis*)

- **Status:** CRPR 1B.1
- **Distribution:** Monterey Bay area and inland to Hollister in Central California.
- **Habitat:** Chaparral with sandy soil at elevations between 100 and 2,495 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral with sandy soil.
- **Occurrence in Project Area:** Documented in the northern, western, and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1938, 1962, 1964, 1969, 1999, 2001, 2007, 2008, 2009, 2016, and 2017.

### Sandmat Manzanita (*Arctostaphylos pumila*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Monterey Bay area in Central California.
- **Habitat:** Openings in closed-cone coniferous forest, cismontane woodland, coastal dunes, coastal scrub, and maritime chaparral with sandy soil at elevations between 10 and 675 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest, chaparral, and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1952 (recorded as possibly extirpated), 1983, 1992, 2014, 2015, and 2017.

### Alkali Milk-Vetch (*Astragalus tener* var. *tener*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal and inland Central California between Sacramento in the north and Monterey to the south.
- **Habitat:** Alkaline playas, valley and foothill grassland (adobe clay), and vernal pools at elevations between 5 and 195 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Annual grassland with adobe clay soils.
- **Occurrence in Project Area:** Documented in the northeast portion of the project area and likely extirpated (Figure 7 series).
- **Year Documented:** 1889 (recorded as likely extirpated).

### Pink Johnny-Nip (*Castilleja ambigua* var. *insalutata*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal Monterey Bay area.
- **Habitat:** Coastal prairie and coastal scrub at elevations up to 330 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Coastal scrub.

- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Years Documented:** 1996 and 1999.

### Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal and inland San Francisco Bay and Monterey Bay areas.
- **Habitat:** Alkaline valley and foothill grassland at elevations up to 755 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Annual grassland.
- **Occurrence in Project Area:** Documented in the northeast, northwest, east-central portions of the project area (Figure 7 series).
- **Years Documented:** 1992, 1998 (recorded as extirpated), 2002, 2003, and 2007.

### Fort Ord Spineflower (*Chorizanthe minutiflora*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Monterey Bay area.
- **Habitat:** Openings in coastal scrub and maritime chaparral with sandy soils at elevations between 180 and 490 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Years Documented:** 1994 and 2013.

### Monterey Spineflower (*Chorizanthe pungens* var. *pungens*)

- **Status:** Federally threatened, CRPR 1B.2
- **Distribution:** Coastal and inland Monterey County, concentrated around the Monterey Bay area and north to Santa Cruz.
- **Habitat:** Cismontane woodland, coastal dunes, coastal scrub, maritime chaparral, and valley and foothill grassland with sandy soil at elevations between 10 and 1,475 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral, coastal scrub, and annual grassland with sandy soil.
- **Occurrence in Project Area:** Documented in the northern, northwest, and southeast portions of the project area (Figure 7 series).
- **Years Documented:** 1929, 1935 (recorded as likely extirpated), 2001, 2014, 2016, and 2017.

### Jolon Clarkia (*Clarkia jolonensis*)

- **Status:** CRPR 1B.2
- **Distribution:** Northern and central Monterey County, both coastal and inland.
- **Habitat:** Chaparral, cismontane woodland, coastal dunes, coastal scrub, and riparian woodland at elevations between 65 and 2,165 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Year Documented:** 1903 and 1912 (recorded as extirpated).

### Seaside Bird's-Beak (*Cordylanthus rigidus* ssp. *littoralis*)

- **Status:** California endangered, CRPR 1B.1
- **Distribution:** Coastal Monterey Bay area and coastal and inland between Santa Barbara and Santa Maria.
- **Habitat:** Closed-cone coniferous forest, cismontane woodland, coastal dunes, coastal scrub, maritime chaparral, and valley and foothill grassland with sandy soil, often in disturbed openings, at elevations up to 1,690 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in mixed conifer forest, chaparral, coastal scrub, and annual grassland with sandy soil.
- **Occurrence in Project Area:** Documented in the northern and northwestern portions of the project area (Figure 7 series).
- **Years Documented:** 1908, 1930, 1940, 1992, 2002, and 2012.

### Hospital Canyon Larkspur (*Delphinium californicum* ssp. *interius*)

- **Status:** CRPR 1B.2
- **Distribution:** Inland Central California between Concord in the north, Monterey in the west, and Soledad in the east.
- **Habitat:** Mesic cismontane woodland, openings in chaparral, and coastal scrub at elevations between 640 and 3,595 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in chaparral and coastal scrub.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area and potentially extirpated (Figure 7 series).
- **Year Documented:** 1988.

### Umbrella Larkspur (*Delphinium umbraculorum*)

- **Status:** CRPR 1B.3
- **Distribution:** Coastal and inland Monterey, San Luis Obispo, and Santa Barbara Counties.
- **Habitat:** Cismontane woodland and chaparral at elevations between 1,310 and 5,250 feet AMSL (CNPS 2026).

- **Suitable Habitat in Project Area:** Chaparral.
- **Occurrence in Project Area:** Documented in the southeastern portion of the project area (Figure 7 series).
- **Year Documented:** 1962.

### Eastwood's Goldenbush (*Ericameria fasciculata*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal and inland Monterey Bay area.
- **Habitat:** Openings in closed-cone coniferous forest, coastal dunes, coastal scrub, and maritime chaparral with sandy soil, at elevations between 100 and 900 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in mixed conifer forest, chaparral, and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the northern, northwestern, and western portions of the project area (Figure 7 series).
- **Years Documented:** 1913, 1932, 1985, 1987, 1992, 1995, 2001, 2003, 2014, and 2015.

### Fort Ord Button-Celery (*Eryngium montereyense*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal Monterey Bay area.
- **Habitat:** Vernally moist swales and vernal pools in valley and foothill grassland surrounded by maritime chaparral and coast live oak woodland, on sandy marine sedimentary substrate (CNPS 2026).
- **Suitable Habitat in Project Area:** Fresh water, annual grassland, chaparral, and oak woodland on sandy marine substrates.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 2023.

### Sand-loving Wallflower (*Erysimum ammophilum*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Santa Cruz, Monterey, and San Diego Counties, and on the Channel Islands.
- **Habitat:** Openings in coastal dunes, coastal scrub, and maritime chaparral with sandy soil, at elevations up to 195 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in chaparral and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Years Documented:** 1992 and 2014.

### Fragrant Fritillary (*Fritillaria liliacea*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal and inland San Francisco Bay and Monterey Bay areas.
- **Habitat:** Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often in serpentine soils, at elevations between 10 and 1,345 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Coastal scrub and annual grassland with serpentine soil.
- **Occurrence in Project Area:** Documented in the northeastern and western portions of the project area and potentially extirpated (Figure 7 series).
- **Years Documented:** 1940 (recorded as possibly extirpated) and 2002.

### Monterey Gilia (*Gilia tenuiflora* ssp. *Arenaria*)

- **Status:** Federally endangered, California threatened, CRPR 1B.2
- **Distribution:** Coastal and inland Monterey Bay area.
- **Habitat:** Openings in cismontane woodland, coastal dunes, coastal scrub, and maritime chaparral with sandy soil at elevations up to 150 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in chaparral and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1985, 1992, 2009, and 2018.

### Santa Cruz Tarplant (*Holocarpha macradenia*)

- **Status:** Federally threatened, California endangered, CRPR 1B.1
- **Distribution:** Coastal north San Francisco Bay and north Monterey Bay areas.
- **Habitat:** Coastal prairie, coastal scrub, and valley and foothill grassland with clay or sandy soil at elevations between 35 and 720 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Coastal scrub and annual grassland with clay or sandy soil.
- **Occurrence in Project Area:** Documented in the northern portion of the project area and potentially extirpated (Figure 7 series).
- **Year Documented:** 1993.

### Kellogg's Horkelia (*Horkelia cuneata* var. *sericea*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal California between Point Reyes (Marin County) in the north and Point Conception (Santa Barbara County) in the south.
- **Habitat:** Openings in closed-cone coniferous forest, coastal dunes, coastal scrub, and maritime chaparral with gravelly or sandy soil, at elevations between 35 and 655 feet AMSL (CNPS 2026).

- **Suitable Habitat in Project Area:** Openings in mixed conifer forest, chaparral, and coastal scrub with gravelly or sandy soil.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1896, 1938, 1992, 1998, and 2004.

### Tidestrom's Lupine (*Lupinus tidestromii*)

- **Status:** Federally endangered, California endangered, CRPR 1B.1
- **Distribution:** Southwestern Monterey Bay and coastal Marin and Sonoma Counties
- **Habitat:** Coastal dunes at elevations up to 330 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** None.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Year Documented:** 2009.

### Carmel Valley Bushmallow (*Malacothamnus involucratus*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal northern and inland central Monterey County.
- **Habitat:** Chaparral, cismontane woodland, and coastal scrub at elevations between 100 and 3,610 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Years Documented:** 1944, 1955, 1956, 1977, 1987, 2002, and 2003.

### Carmel Valley Malacothrix (*Malacothrix saxatilis* var. *arachnoidea*)

- **Status:** CRPR 1B.2
- **Distribution:** Inland northern Monterey County, southern San Benito County, and inland eastern Santa Barbara County.
- **Habitat:** Rocky chaparral and coastal scrub at elevations between 80 and 3,400 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub with rocky substrates.
- **Occurrence in Project Area:** Documented in the western and southwestern portions of the project area (Figure 7 series).
- **Years Documented:** 1977 and 1990.

### Marsh Microseris (*Microseris paludosa*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Northern and Central California between Point Arena (Mendocino County) in the north and Point Piedras Blancas (San Luis Obispo) in the south.
- **Habitat:** Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations between 15 and 1,165 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest, coastal scrub, and annual grassland.
- **Occurrence in Project Area:** Documented in the western and central portions of the project area (Figure 7 series).
- **Years Documented:** 1901, 1970, and 1997.

### Northern Curly-Leaved Monardella (*Monardella sinuata* ssp. *Nigrescens*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal Northern and Central California between Point Reyes (Marin County) and Monterey Bay (Monterey County).
- **Habitat:** Chaparral (in Santa Cruz County), coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills in Santa Cruz County) with sandy soil at elevations up to 985 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Years Documented:** 1919, 1990, and 2010.

### Woodland Woollythreads (*Monolopia gracilens*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal and inland San Francisco Bay and Monterey Bay areas, coastal and inland southern Monterey County and north San Luis Obispo County.
- **Habitat:** Openings in broadleaf upland forest, chaparral, cismontane woodland, north coast coniferous forest, and valley and foothill grassland with serpentine soils at elevations between 330 and 3,935 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in mixed conifer forest, chaparral, and annual grassland with serpentine soil.
- **Occurrence in Project Area:** Documented in the northern and western portions of the project area and potentially extirpated (Figure 7 series).
- **Years Documented:** 1897 and 1915.

### Monterey Pine (*Pinus radiata*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal southern San Mateo County, northern Santa Cruz County, Monterey Bay (northwestern Monterey County), and northern San Luis Obispo County.
- **Habitat:** Closed-cone coniferous forest and cismontane woodland at elevations between 80 and 605 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Year Documented:** 2018.

### Yadon's Rein Orchid (*Piperia yadonii*)

- **Status:** Federally endangered, CRPR 1B.1
- **Distribution:** Coastal northern and northwestern Monterey County.
- **Habitat:** Coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral with sandy soils at elevations between 35 and 1,675 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest and chaparral with sandy soil.
- **Occurrence in Project Area:** Documented in the northern and western portions of the project area (Figure 7 series).
- **Years Documented:** 1995, 1996, 2001, 2002, 2005, 2010, 2013, 2014, and 2017.

### Choris' Popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal southern San Francisco Bay area and south along the coast to northern Monterey Bay.
- **Habitat:** Chaparral, coastal prairie, and coastal scrub with mesic soils at elevations between 10 and 525 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub with mesic soils.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 2009.

### Pine Rose (*Rosa pinetorum*)

- **Status:** CRPR 1B.2
- **Distribution:** Coastal northern Santa Cruz County and northern and central Monterey County along the coast and inland.
- **Habitat:** Closed-cone coniferous forest and cismontane woodland at elevations between 5 and 3,100 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest.

- **Occurrence in Project Area:** Documented in the northern portion of the project area (Figure 7 series).
- **Year Documented:** 1993.

### Santa Cruz Microseris (*Stebbinsoseris decipiens*)

- **Status:** CRPR 1B.2
- **Distribution:** Northern and Central California coast between Point Reyes in the north and Monterey Bay in the south. Also documented inland just north of Paso Robles and east of Camp Roberts in southern Monterey County.
- **Habitat:** Openings in broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland sometimes with serpentine soils at elevations between 35 and 1,640 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in mixed conifer forest, chaparral, coastal scrub, and annual grassland with serpentine soil.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 1978.

### Santa Cruz Clover (*Trifolium buckwestiorum*)

- **Status:** CRPR 1B.1
- **Distribution:** Coastal and inland Northern and Central California, generally between Fort Bragg (Mendocino County) in the north and Monterey Bay area (Monterey County) in the south.
- **Habitat:** Broadleaf upland forest, cismontane woodland, and coastal prairie with gravelly soils at elevations between 115 and 2,000 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** None.
- **Occurrence in Project Area:** Documented in the west-central and central portions of the project area (Figure 7 series).
- **Year Documented:** 1993 and 1998.

### Pacific Grove Clover (*Trifolium polyodon*)

- **Status:** California rare, CRPR 1B.1
- **Distribution:** Coastal and inland Central and Northern California, generally from Petaluma (Sonoma County) in the north and Monterey Bay area (Monterey County) in the south.
- **Habitat:** Closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland with granitic (sometimes) and mesic soils at elevations between 15 and 1,395 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Mixed conifer forest and annual grassland with granitic or mesic soils.

- **Occurrence in Project Area:** Documented in the west-central and central portions of the project area (Figure 7 series).
- **Years Documented:** 1995, 1997 and 2005.

### Monterey Clover (*Trifolium trichocalyx*)

- **Status:** Federally endangered, California endangered, CRPR 1B.1
- **Distribution:** Coast and inland between Fort Bragg and Point Arena (Mendocino County) and coastal Monterey Bay and peninsula (Monterey County).
- **Habitat:** Openings in closed-cone coniferous forest, often post-burn areas, with sandy soils at elevations between 100 and 1,000 feet AMSL (CNPS 2026).
- **Suitable Habitat in Project Area:** Openings in mixed conifer forest with sandy soil.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Year Documented:** 2022.

## 3.3.2 Sensitive Wildlife Species

A total of 26 sensitive wildlife species (three invertebrates, two fish, six amphibians, four reptiles, five birds, and six mammals) have been documented in the project area, are listed in Table 3, and are discussed in more detail in the following sections.

**Table 3. Sensitive Wildlife Species Documented in the Project Area**

| Species | | Status |
|---|---|---|
| **Scientific Name** | **Common Name** | **Federal/State** |
| **Invertebrates** | | |
| *Bombus occidentalis* | Western bumble bee | None/CCE |
| *Danaus plexippus plexippus* (pop. 1) | Monarch – California overwintering population | FC/None |
| *Euphilotes enoptes smithi* | Smith's blue butterfly | FE/None |
| **Fish** | | |
| *Lavinia exilicauda harengus* | Monterey hitch | None/SSC |
| *Oncorhynchus mykiss irideus (*pop. 9) | Steelhead – South-Central California coast DPS | FT/SSC |
| **Amphibians** | | |
| *Ambystoma californiense* (pop. 1) | California tiger salamander – Central California DPS | FT/CT, WL |
| *Ambystoma macrodactylum croceum* | Santa Cruz long-toed salamander | FE/CE, CFP |
| *Rana boylii (*pop. 6) | Foothill yellow-legged frog – South Coast DPS | FE/CE |
| *Rana draytonii* | California red-legged frog | FT/SSC |
| *Spea hammondii* | Western spadefoot | FPT/SSC |
| *Taricha torosa* | Coast Range newt | None/SSC |

**Table 3. Sensitive Wildlife Species Documented in the Project Area**

| Species | | Status |
|---|---|---|
| **Scientific Name** | **Common Name** | **Federal/State** |
| **Reptiles** | | |
| *Actinemys marmorata* | Northwestern pond turtle | FPT/SSC |
| *Actinemys pallida* | Southwestern pond turtle | FPT/SSC |
| *Anniella pulchra* | Northern California legless lizard | None/SSC |
| *Phrynosoma blainvillii* | Blainville's (coast) horned lizard | None/SSC |
| **Birds** | | |
| *Agelaius tricolor* | Tricolored blackbird | None/CT, SSC |
| *Athene cunicularia* | Western burrowing owl | None/CCE, SSC |
| *Coturnicops noveboracensis* | Yellow rail | None/SSC |
| *Eremophila alpestris actia* | California horned lark | None/WL |
| *Vireo bellii pusillus* | Least Bell's vireo | FE/CE |
| **Mammals** | | |
| *Corynorhinus townsendii* | Townsend's big-eared bat | None/SSC |
| *Neotoma macrotis luciana* | Monterey dusky-footed woodrat | None/SSC |
| *Puma concolor* | Mountain lion – Central Coast and Southern California DPS | None/CT |
| *Sorex ornatus salarius* | Monterey shrew | None/SSC |
| *Taxidea taxus* | American badger | None/SSC |
| *Vulpes macrotis mutica* | San Joaquin kit fox | FE/CT |

**Sources:** CDFW 2026a, 2026b; USFWS 2026b.

**Notes:** CCE = California candidate endangered; CE = California endangered; CFP= California fully protected; CT = California threatened; DPS = distinct population segment; FC = federal candidate for listing; FE = federally endangered; FT= federally threatened; FPT = federally proposed threatened; SSC = CDFW species of special concern; WL = CDFW watch list.

# Invertebrates

## Western Bumble Bee (*Bombus occidentalis*)

- **Status:** California candidate endangered species
- **Distribution:** Historically common in the western United States and western Canada. Since 1998, drastic population decreases in Central California, Oregon, Washington and southern British Columbia.
- **Habitat:** Three basic habitat requirements: suitable nesting sites (primarily underground cavities) for the colonies, nectar and pollen from floral resources available throughout the duration of the colony period (spring through fall), and suitable overwintering sites (loose soils for burrowing) for the queens. Occurs in a variety of habitats in which the three basic requirements are present, including conifer forests, grasslands, mixed woodlands, agricultural (row crops and orchards), and urban/developed land (USDA 2026c; Xerces Society 2026).

- **Suitable Habitat in Project Area:** Mixed conifer forest, oak woodland, agricultural land, and urban/developed land with underground cavities, flowering nectar and pollen plants, and open areas with loose soils for overwintering.
- **Occurrence in Project Area:** Documented in the northern, northeastern, western, and southeastern portions of the project area, but potentially extirpated (Figure 7 series).
- **Years Documented:** 1935, 1938, 1965, and 1972.

### Monarch – California Overwintering Population (*Danaus plexippus plexippus*)

- **Status:** Federal candidate
- **Distribution:** North America (United States, Canada, and Mexico), Central and South America, Australia, Pacific Islands, Asia, Africa, and southern Europe.
- **Habitat:** Occurs in a variety of habitats where patches of milkweed (*Asclepias* sp.), the monarch caterpillar host plant, are present. Overwinter in groves of eucalyptus, cypress, and pine with appropriate structure and microclimate along the California coast and high-elevation forests in Mexico.
- **Suitable Habitat in Project Area:** Vegetation communities and land cover types where milkweed is available, as well as eucalyptus, cypress, and pine groves with appropriate structure and microclimate for overwintering.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series).
- **Year Documented:** 1984.

### Smith's Blue Butterfly (*Euphilotes enoptes smithi*)

- **Status:** Federally endangered
- **Distribution:** Endemic to the central coast of California, ranging from coastal Monterey Bay area in the north and south along the coast of Monterey County and into northern San Luis Obispo County in the south.
- **Habitat:** Occurs in coastal chaparral, coastal dunes, and grassland where the species' two host and nectar plants, seacliff buckwheat (*Eriogonum parvifolium*) and coast buckwheat (*Eriogonum latifolium*), occur (USFWS 2020).
- **Suitable Habitat in Project Area:** Chaparral and annual grassland along the coast with available seacliff buckwheat and coast buckwheat.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1991 and 2004.

## Fish

### Monterey Hitch (*Lavinia exilicauda harengus*)

- **Status:** CDFW species of special concern (SSC)
- **Distribution:** Pajaro and Salinas River systems
- **Habitat:** Occurs in a variety of habitats, particularly abundant in lowland areas with large pools containing substrates of sand and gravel with available cover (e.g., fallen trees, overhanging bushes) or in small reservoirs with similar habitat conditions (CDFW 2026e).
- **Suitable Habitat in Project Area:** Fresh water with sand and gravel substrates and available cover.
- **Occurrence in Project Area:** Documented in the northern portion of the project area (Figure 7 series). The location of this data point is likely not accurate.
- **Year Documented:** 2018

### Steelhead – South-Central California Coast DPS (*Oncorhynchus mykiss irideus* [Pop. 9])

- **Status:** Federally threatened, CDFW SSC
- **Distribution:** Watersheds from the Parajo River south to Arroyo Grande Creek along the south-central coast of California.
- **Habitat:** Migrate between fresh water breeding and marine non-breeding habitats. Occur in the ocean, in rivers and creeks, and in large inland lakes. Adults are winter-run, beginning upstream migrations to fresh water during peak flows in December and February. Spawns in gravelly substrate in cool, clear, well-oxygenated streams (natal stream), usually at the tail of a pool or at the riffle at the head of a pool; favors areas with well-vegetated banks and abundant instream cover such as boulders, logs, and undercut banks. Fry stay in deeper mid-channel locations until 2 years of age and then move to marine environments (California Trout 2026).
- **Suitable Habitat in Project Area:** Fresh water streams and lakes along the coast.
- **Occurrence in Project Area:** Documented in the western portion of the project area (Figure 7 series). The location of this data point is likely not accurate.
- **Year Documented:** 2000.

## Amphibians

### California Tiger Salamander – Central California DPS (*Ambystoma californiense* [Pop. 1])

- **Status:** Federally threatened, California threatened, CDFW WL
- **Distribution:** Restricted to the Central Valley and Inner Coast Range, from Tulare and San Luis Obispo counties in the south to Sacramento, and Yolo counties in the north.

- **Habitat:** Occurs in grassland, oak savanna, and mixed woodlands edges or lower elevation coniferous forest edges with suitable burrows present during the non-breeding season. Will migrate from November through May at night to seek breeding ponds and pools that are absent of predatory fish (USFWS 2026c).
- **Suitable Habitat in Project Area:** Annual grassland, oak woodland, and mixed conifer forest near fresh water ponds and pools absent of fish for breeding.
- **Occurrence in Project Area:** Documented in the northern, north-central, western, and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1952 (possibly extirpated), 1992, 2003, 2005, 2006, 2007, 2008, 2016, and 2018.

### Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*)

- **Status:** Federally endangered, California endangered, California Fully Protected
- **Distribution:** Restricted to southern Santa Cruz and northern Monterey Counties.
- **Habitat:** Occurs in ephemeral wetlands for breeding and adjacent dense riparian uplands (CDFW 2026f).
- **Suitable Habitat in Project Area:** Freshwater and freshwater marsh.
- **Occurrence in Project Area:** Documented in the northern, north-central, western, and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 2011, 2022, and 2023.

### Foothill Yellow-Legged Frog – South Coast DPS (*Rana boylii* [Pop. 6])

- **Status:** Federally endangered, California endangered
- **Distribution:** Pacific Coast to the western slopes of the Sierra Nevada and Cascades mountains up to approximately 5,000 feet in elevation.
- **Habitat:** Occurs in a variety of vegetation communities including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, mixed chaparral and wet meadows. Closely associated with streams and require shallow and rocky streams that are at least partially exposed to direct sunlight for breeding (USFWS 2026c).
- **Suitable Habitat in Project Area:** Mixed conifer forest and freshwater marsh near freshwater streams for breeding.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1904 (possibly extirpated), 1907 (possibly extirpated), and 1957.

### California Red-Legged Frog (*Rana draytonii*)

- **Status:** Federally threatened, CDFW SSC
- **Distribution:** California coast in southern Mendocino County, inland to Shasta County, California, and south to Baja California, Mexico.
- **Habitat:** Occurs in or near water sources like streams or stock ponds with refugia like rocks or boulders, leaf litter, small stream channels, or animal burrows. Breeding habitats are aquatic, typically ephemeral or permanent pools, or backwaters within streams and creeks, also ponds, marshes, springs, dune ponds, lagoons, cattle ponds, and marshes without bullfrogs or predatory fish. Requires upland areas for movement and dispersal and areas for refugia and aestivation when waters dry up (USFWS 2026c).
- **Suitable Habitat in Project Area:** Fresh water streams and ponds and freshwater marsh without bullfrogs or predatory fish near uplands for dispersal and aestivation.
- **Occurrence in Project Area:** Documented in the northern, western, and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1990, 1996, 1999, 2001, 2003, 2004, 2006, and 2007.

### Western Spadefoot (*Spea hammondii*)

- **Status:** Federally proposed threatened, CDFW SSC
- **Distribution:** Endemic to California and northern Baja California. The northern DPS ranges from Shasta County through the Central Valley, and down the coast from Santa Clara County to Santa Barbara County.
- **Habitat:** Occurs open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal pools or similar shallow, temporary pools that do not contain bullfrogs, fish, or crayfish are necessary for breeding (USFWS 2026c; California Herps 2026a).
- **Suitable Habitat in Project Area:** Oak woodland, annual grassland, coastal scrub, chaparral, fresh water streams and pools with sandy or gravelly soils. The presence of predators likely reduces the habitat suitability for breeding.
- **Occurrence in Project Area:** Documented in the north-central portion of the project area, and potentially extirpated (Figure 7 series).
- **Year Documented:** 1922.

### Coast Range Newt (*Taricha torosa*)

- **Status:** CDFW SSC
- **Distribution:** Endemic to California, ranging throughout the coast and Coast Range mountains from Mendocino County to San Diego County.
- **Habitat:** Occurs in oak woodlands, chaparral, and grasslands (California Herps 2026b).
- **Suitable Habitat in Project Area:** Oak woodland, chaparral, and annual grassland.

- **Occurrence in Project Area:** Documented in the central portion of the project area (Figure 7 series).
- **Year Documented:** 2017.

## Reptiles

### Northwestern Pond Turtle (*Actinemys marmorata*)

- **Status:** Federally proposed threatened, CDFW SSC
- **Distribution:** San Joaquin Valley north, all populations in California north of the middle of Monterey Bay, the Coastal and Cascade Ranges of Oregon and Washington State, and an outlying population in Nevada.
- **Habitat:** Occurs in slow-moving permanent or intermittent streams, ponds, lakes, permanent and ephemeral wetlands, and reservoirs with emergent basking sites. This species spends most of its life in water, but also requires terrestrial habitats for nesting and during winter (USFWS 2026c; USFWS 2026d).
- **Suitable Habitat in Project Area:** Fresh water streams and ponds and freshwater marsh with surrounding uplands for nesting.
- **Occurrence in Project Area:** Documented in the northern portion of the project area (Figure 7 series).
- **Year Documented:** 2001 and 2006.

### Southwestern Pond Turtle (*Actinemys pallida*)

- **Status:** Federally proposed threatened, CDFW SSC
- **Distribution:** Restricted to the central Coast Range south from the middle of Monterey Bay to the species' southern range boundary in Baja California.
- **Habitat:** Occurs in slow-moving permanent or intermittent streams, ponds, lakes, permanent and ephemeral wetlands, and reservoirs with emergent basking sites. This species spends most of its life in water, but also requires terrestrial habitats for nesting and during winter (USFWS 2026c; USFWS 2026d).
- **Suitable Habitat in Project Area:** Fresh water streams and ponds and freshwater marsh with surrounding uplands for nesting.
- **Occurrence in Project Area:** Documented in the northern portions of the project area (Figure 7 series).
- **Year Documented:** 2001, 2002, 2003, and 2017.

### Northern California Legless Lizard (*Anniella pulchra*)

- **Status:** CDFW SSC
- **Distribution:** California Coast Ranges from Antioch, Contra Costa County, the San Joaquin Valley from San Joaquin County south, the west slope of the southern Sierras,

the Tehachapi Mountains west of the desert, the mountains of Southern California, and south to the U.S./Mexico border.

- **Habitat:** Occurs in moist, warm, and loose soil (sand, loam, humus) in sparsely vegetated areas in a variety of habitats with available cover in shrubs or leaf litter (CDFW 2000a).
- **Suitable Habitat in Project Area:** Sparsely vegetated areas with suitable soils and available cover.
- **Occurrence in Project Area:** Documented in the western, west-central, and southern portions of the project area (Figure 7 series).
- **Year Documented:** 1946, 1957, 1971, 1984, 1998, 2004, 2006, 2007, 2008, 2014, 2015, and 2018.

### Blainville's (Coast) Horned Lizard (*Phrynosoma blainvillii*)

- **Status:** CDFW SSC
- **Distribution:** Sierra Nevada foothills from Butte County to Kern County and throughout the Central and Southern California coast.
- **Habitat:** Occurs in sandy soils in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats (CDFW 2000b).
- **Suitable Habitat in Project Area:** Mixed conifer forest and annual grassland with sandy soils.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 1992, 1999, 2004, and 2006.

## Birds

### Tricolored Blackbird (*Agelaius tricolor*)

- **Status:** USFWS Bird of Conservation Concern, California threatened, CDFW SSC
- **Distribution:** West coast of the United States and Baja California, Mexico.
- **Habitat:** Occurs in wetland and grassland habitats. Breeding colonies are found in rice-growing regions of the Sacramento Valley and pasturelands of the San Joaquin Valley and lower Sacramento Valley. Known to nest in wetlands with cattails, bulrushes, blackberry hedges, and willows as well as agricultural fields and vegetated ditches (Shuford et al. 2008).
- **Suitable Habitat in Project Area:** Freshwater marsh, annual grassland, and agricultural land with suitable nesting habitat.
- **Occurrence in Project Area:** Documented in the northern and north-central portions of the project area (Figure 7 series).
- **Year Documented:** 1936 (possibly extirpated) and 1963.

### Western Burrowing Owl (*Athene cunicularia*)

- **Status:** USFWS Bird of Conservation Concern, CDFW SSC
- **Distribution:** Throughout the United States, Mexico, Central America, South America, and northeast Caribbean.
- **Habitat:** Occurs in open, dry annual or perennial grasslands, deserts, and scrublands, as well as agricultural and ruderal landscapes, characterized by low-growing vegetation with available burrows or burrow-like structures such as culverts. Often associated with high densities of burrowing small mammals (Shuford et al. 2008).
- **Suitable Habitat in Project Area:** Annual grassland and coastal scrub with low-growing vegetation and available small mammal burrows or burrow-like structures.
- **Occurrence in Project Area:** Documented in the north-central and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1965, 2004, and 2007.

### Yellow Rail (*Coturnicops noveboracensis*)

- **Status:** CDFW SSC
- **Distribution:** United States and Canada. Only known in California during breeding season in the northeastern interior and as a winter migrant on the coast and in the Suisun Marsh region.
- **Habitat:** Dense sedge marshes and meadows with moist soils or shallow standing water for nesting during breeding season. Known to inhabit wet meadows and coastal tidal marshes during winter migration (CDFW 2026g).
- **Suitable Habitat in Project Area:** Freshwater marsh during migration; not expected to nest in the project area.
- **Occurrence in Project Area:** Documented in the north-central and western portions of the project area (Figure 7 series).
- **Year Documented:** 1896 and 2014.

### California Horned Lark (*Eremophila alpestris actia*)

- **Status:** CDFW WL
- **Distribution:** California
- **Habitat:** Occurs primarily in grassland and beach habitats but can also be found in disturbed lands, agricultural lands, and alpine fell fields in the Sierra Nevada (CDFW 2026h).
- **Suitable Habitat in Project Area:** Annual grassland and agricultural land.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 1992 and 2004.

### Least Bell's Vireo (*Vireo belli pusillus*)

- **Status:** Federally endangered, California endangered
- **Distribution:** California and northern Baja California, Mexico during breeding season and winters in southern Baja California, Mexico.
- **Habitat:** Occurs in a variety of habitats, but most often associated with riparian habitat vegetated with willow species in Southern California below 2,000 feet in elevation. Requires dense understory shrub cover for nest concealment, with an overstory dominated by willows.
- **Suitable Habitat in Project Area:** None – no riparian woodland with dense understory and willow overstory occur in the project area. Suitable habitat may occur within 100 feet of the project area.
- **Occurrence in Project Area:** Documented in the southern portion of the project area and potentially extirpated (Figure 7 series).
- **Year Documented:** 1919.

## Mammals

### Townsend's Big-Eared Bat (*Corynorhinus townsendii*)

- **Status:** CDFW SSC
- **Distribution:** Western North America.
- **Habitat:** Occurs in all habitat types except alpine, but it is rare throughout most of its range. Roosts in caves, buildings, tunnels, mines, and other human-made structures (CDFW 2026i).
- **Suitable Habitat in Project Area:** Variety of habitats near caves or structures for roosting, as well as stands of California bay and redwood trees with hollows for roosting, away from human-populated areas.
- **Occurrence in Project Area:** Documented in the west-central portion of the project area (Figure 7 series).
- **Year Documented:** 2013.

### Monterey Dusky-Footed Woodrat (*Neotoma macrotis luciana*)

- **Status:** CDFW SSC
- **Distribution:** Coastal California from Monterey Bay to Morrow Bay.
- **Habitat:** Occurs in riparian forest, woodland, shrubland, and chaparral (Nature Serve 2026).
- **Suitable Habitat in Project Area:** Oak woodland and coastal scrub.
- **Occurrence in Project Area:** Documented in the central portion of the project area (Figure 7 series).
- **Year Documented:** 2017.

### Mountain Lion – Central Coast and Southern California DPS (*Puma concolor*)

- **Status:** California threatened
- **Distribution:** Western United States, Mexico, Central America and South America. In California, Central Coast and Southern California distinct population segments are state threatened.
- **Habitat:** Occurs in a variety of habitats including riparian woodland, forest, scrub, chaparral, grassland and desert habitats; wherever mule deer occur. Canyons may serve as long distance movement corridors. Habitat and/or terrain that provides sufficient cover is necessary for hunting, resting and denning.
- **Suitable Habitat in Project Area:** Coastal scrub, oak woodland, annual grassland.
- **Occurrence in Project Area:** Unknown.
- **Year Documented:** Unknown.

### Monterey Shrew (*Sorex ornatus salarius*)

- **Status:** CDFW SSC
- **Distribution:** Monterey County.
- **Habitat:** Occurs in valley-foothill and montane riparian, woodland, chaparral, grassland, and emergent wetland habitats with stumps, logs, and vegetation litter for cover (CDFW 2026j).
- **Suitable Habitat in Project Area:** Oak woodland, annual grassland, and freshwater marsh with available cover.
- **Occurrence in Project Area:** Documented in the western portion of the project area, potentially extirpated (Figure 7 series).
- **Year Documented:** 1909, 1915, 1927, and 1938.

### American Badger (*Taxidea taxus)*

- **Status:** CDFW SSC
- **Distribution:** Throughout most of California, except in the northern North Coast area.
- **Habitat:** Occurs in habitats with friable soils, including open plains and prairies, farmland, scrub, forest, and occasionally woodland edges (CDFW 2026k).
- **Suitable Habitat in Project Area:** Agricultural land, annual grassland, coastal scrub, mixed conifer forest, and oak woodland with friable soils for burrowing.
- **Occurrence in Project Area:** Documented in the western and west-central portions of the project area (Figure 7 series).
- **Year Documented:** 1919 and 1992.

### San Joaquin Kit Fox (*Vulpes macrotis mutica*)

- **Status:** Federally endangered, California threatened
- **Distribution:** San Joaquin Valley in California, from San Joaquin County in the north to Kern County in the south, and Coast Range, including the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County.
- **Habitat:** Occurs in desert and grasslands, preferring areas with minimal shrub and herbaceous cover (USFWS 2026c).
- **Suitable Habitat in Project Area:** Sparsely vegetated annual grassland.
- **Occurrence in Project Area:** Documented in the southern portion of the project area (Figure 7 series).
- **Year Documented:** 1975.

## 3.3.3 Critical Habitat

Critical habitat is the specific areas within the geographic range occupied by the species that contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection (USFWS 2026e).

The potential presence of critical habitat in the project area was also analyzed. A total of two plants and five wildlife species have designated critical habitat mapped in the project area (Figure 8, Critical Habitat – Index, and Figures 8a through 8i, Critical Habitat) (CDFW 2026a, 2026b; USFWS 2026b; USFWS 2026f). The seven species and their designations are listed below:

### 3.3.3.1 Plants

- Monterey spineflower – federally threatened, CRPR 1B.2
- Santa Cruz tarplant – federally threatened, California endangered, CRPR 1B.1

### 3.3.3.2 Wildlife

#### Invertebrates

- Vernal pool fairy shrimp (*Branchinecta lynchi*) – federally threatened

#### Fish

- Tidewater goby (*Eucyclogobius newberryi*) – federally endangered

#### Amphibians

- California red-legged frog – federally threatened, CDFW SSC
- California tiger salamander – federally threatened, California threatened, WL

#### Birds

- Western snowy plover (*Charadrius alexandrinus nivosus*) – federally threatened

Only one designated critical habitat, for California red-legged frog, occurs within the opportunity sites, including sites 23, 36, 38, 55, and 56 (Figure 8 series).

### 3.3.4 Nesting Birds

The project area contains suitable nesting habitat for many bird and raptor species protected under the CFGC and the Migratory Bird Treaty Act (MBTA).

The majority of habitat for nesting birds in the project area is in the innumerable native and ornamental trees, shrubs, and buildings of the developed land. The structures in the developed land could support nesting of certain species that use structures with eaves, ledges, crevices, cracks, and other "cavities," nest in or on utility structures, or nest on rooftops, such as black phoebe (*Sayornis nigricans*), gulls (*Larus* sp.), and Bewick's wren (*Thryomanes bewickii*). Grassland- and ground-nesting species, such as the sensitive California horned lark and western burrowing owl, documented in the project area could nest in the annual grassland and open agricultural land throughout the project area. Freshwater marsh habitat in the project area provides potentially suitable nesting habitat for sensitive tricolored blackbird and yellow rail as well. The trees throughout the project area could also support nesting by more common birds, including Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), and orioles (*Icterus* sp.), which often nest in ornamental palm and eucalyptus trees. The availability of large amounts of high-quality nesting habitat with access to nearby food and water sources indicates birds and raptors likely use the survey area for nesting.

### 3.3.5 Sensitive Roosting Bats

The project area contains suitable foraging and roosting habitat for sensitive bat species, including Townsend's big-eared bat, which was documented in the west-central portion of the project area (Table 2; Figure 7 series). The structures in the developed land of the project area provide suitable roosting habitat for structure- and cavity-dwelling bats such as Townsend's big-eared bat and big brown bat (*Eptesicus fuscus*). The numerous native trees in the woodland and forest communities and the ornamental trees throughout the developed land of the project area could provide suitable roosting habitat for tree-roosting bats, such as the hoary bat (*Lasiurus cinereus*) and western red bat (*Lasiurus blossevillii*). Western red bat is a CDFW species of special concern. The sources of open, freshwater throughout the project area provide suitable foraging habitat for bats roosting in the area that forage over sources of open water, such as the western mastiff bat (*Eumops perotis*). The availability of suitable habitat indicates bats are likely roosting and foraging in the survey area.

## 3.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors provide routes for local movement and also regional linkages and corridors, often following linear topographic, vegetation, or water features. These corridors can be continuous habitats features, or "stepping stone" areas, providing critical rest and foraging areas for birds traveling along

migratory routes, for example. Local routes of movement provide constant connections to resources that include sources of water, home/cover sites, and foraging areas. Regional linkages and movement corridors provide larger patches of open space to allow relatively free movement of wildlife species along multiple paths between important resources. These areas allow for not only long-term genetic flow between subpopulations but also critical pathways of seasonal/migratory movements. Larger predatory mammals often use regional corridors for hunting and reproduction needs. Potential wildlife corridors can include streams, riparian areas, and culverts under roadways. Habitat characteristics considered included topography, habitat quality, and adjacent land uses.

The project area provides opportunities for wildlife movement and dispersal and provides connections to surrounding and nearby open space areas. In addition, the project area contains suitable nesting, foraging, and nursery sites for many wildlife species.

The major aquatic resources, including rivers, streams, lakes, sloughs, lagoons, and bays, as well as riparian corridors around many of these features, provide important wildlife movement corridors throughout the County. These areas function to facilitate amphibian, fish, reptile, bird, and mammal movement in the region. The network of mountain ranges that extend through the project area, including the Coastal Range, Diablo Range, Gabilan Range, Santa Lucia Range, and Temblor Range, also function as corridors for wildlife movement through the open space and native vegetation communities that occur in these areas.

The CDFW California Terrestrial Habitat Connectivity dataset documents most of the UMC as containing large contiguous natural areas and linkages or corridors that connect existing core natural areas (CDFW 2026c). The highest-quality terrestrial connectivity areas occur along the Pacific Coast south of Carmel to the southern edge of the UMC centering on the Santa Lucia Range and inland along the Coastal and Diablo Ranges. Fort Ord National Monument is connected to Carmel Valley and the Santa Lucia Range along the coast by large blocks of open space that function as movement corridors and habitat linkages as well. However, portions of the UMC have been identified as containing limited connectivity opportunity due to linear transportation corridors and urban development, primarily along the U.S. Route 101 (also known as Highway 101) corridor between King City and Salinas and north along the Pacific Coast between Monterey and Santa Cruz (CDFW 2026c). Similarly, sections of the U.S. Route 101 corridor have been identified by CDFW as barriers to terrestrial wildlife connectivity in the UMC, including a portion of the highway between Salinas and Gilroy. These barriers disrupt an important coastal habitat linkage for medium and large mammals like badger (*Taxidea taxus*), bobcat (*Lynx rufus*), black bear (*Ursus americanus*), mountain lion (*Puma concolor*), and mule deer (*Odocoileus hemionus*), as well as amphibians like California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*) moving between the Santa Cruz Mountains and the Gabilans Range (CDFW 2026d).

The project area is also in the Pacific Flyway, the major migratory bird corridor of the western United States. Wildlife refuges and preserves have been designated in the County, including Salinas River National Wildlife Refuge and Carmel River Lagoon and Wetland Natural Preserve in the north and Morro Estuary Natural Preserve in the south, to provide rest stops along the annual migration routes for migratory bird species. The project area contains open space, native vegetation, and aquatic resources, and its position in the Pacific Flyway migratory corridor makes it very likely to provide habitat for migratory birds traveling between nesting and wintering areas.

The project area is likely to be used as a movement corridor for both sensitive and common wildlife species because of the native vegetation communities, undeveloped open space, Pacific Coast shoreline, inland mountainous regions, and numerous fresh water aquatic resources within and adjacent to the project area. Although transportation corridors and areas of urban development may impede some east–west wildlife movement in the northern portion of the UMC, the open space in the project area has the potential to provide important habitat connectivity both locally and regionally.

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# Section 4 Regulatory Framework

This section summarizes federal, state, regional, and local regulations, plans, policies, and programs that provide protection and management of sensitive biological resources that are applicable to the project. The federal government administers non-marine plant- and wildlife-related issues through the USFWS, while waters of the U.S. issues are administered by the USACE. California law relating to wetland, water-related, and wildlife issues is administered by the CDFW. Under the California Environmental Quality Act (CEQA), impacts associated with a project or program are assessed with regard to significance criteria determined by the CEQA lead agency (in this case, the County) pursuant to the CEQA Guidelines. Biological resources-related laws and regulations that apply include the federal Endangered Species Act, MBTA, Clean Water Act (CWA), CEQA, California Endangered Species Act, and CFGC.

## 4.1 Federal

**Coastal Zone Management Act of 1972 (16 USC 1451 through 1464, Chapter 33).** The Coastal Zone Management Act is administered by the National Oceanic and Atmospheric Administration's Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and—where possible—enhance or restore the Coastal Zone in the United States. California has a federally approved Coastal Zone Management Program, and the Coastal Zone Management Act is administered by the California Coastal Commission. Therefore, the Coastal Zone Management Program and permit requirements are discussed further in the California Coastal Act section under state regulations.

**Federal Clean Water Act (U.S. Code, Title 33, Sections 1251–1376).** The federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project proponent to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The State Water Resources Control Board administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

**Federal Endangered Species Act, Sections 7 and 9 (16 USC 1531 et seq.; 50 CFR Part 402).** This act prohibits the "take" (i.e., harm, harass, or kill individuals or destroy associated habitat) of species federally listed as threatened or endangered. Take incidental to otherwise lawful activities can be authorized by the USFWS through a permit under the federal Endangered Species Act, Sections 4(d), 7, or 10(a).

**Migratory Bird Treaty Act (U.S. Code, Title 16, Sections 703–712).** The MBTA prohibits the direct or indirect take of migratory birds and their active nests unless permitted.

**Wetlands and Other Waters of the United States.** Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. In accordance with the Navigable Waters Protection Rule, effective June 22, 2020, the USACE exerts jurisdiction over waters of the United States, including the territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters (33 CFR Part 328; 40 CFR Parts 110, 112, 116, 117, 120, 122, 230, 300, 302, and 401).

## 4.2 State

**Birds of Prey Protection Provision (California Fish and Game Code, Section 3503.5).** This provision prohibits the taking of birds of prey (Order Falconiformes and Strigiformes), including their nests and eggs.

**California Coastal Act and California Coastal Commission.** The California Coastal Commission (CCC) was established by voter initiative in 1972 and was made permanent by the California Legislature through the adoption of the California Coastal Act (CCA) of 1976 (California Public Resources Code, Section 30000 et seq.). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the Coastal Zone. Under the CCA, cities and counties are responsible for preparing Local Coastal Programs to obtain authority to issue coastal development permits for projects in their jurisdiction. Local Coastal Programs consist of Land Use Plans, zoning ordinances, zoning maps, and other implementing actions that conform to CCA policies. Until an agency has a fully certified Local Coastal Program, the CCC is responsible for issuing coastal development permits.

Under the CCA, Section 30107.5 labels environmentally sensitive habitat areas are areas in the Coastal Zone "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

Section 30240 of the CCA states:

- Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would

significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

In addition, the CCC regulates impacts on coastal wetlands defined in Section 30121 of the CCA as "lands in the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." Under the CCC's definition of wetlands (refer to California Code of Regulations, Section 13577[b]), a wetland need only display one of the parameters typically used to define wetland areas, in contrast to the USACE, which uses a three-parameter definition under its federal authorities. The CCA requires that most development avoid and buffer coastal wetland resources in accordance with Sections 301231 and 30233, including limiting the filling of wetlands to certain allowable uses. Portions of the project area are in the Coastal Zone and, therefore, are subject to the CCA.

**California Endangered Species Act (California Fish and Game Code, Section 2050 et seq.).** This act prohibits any activities that would jeopardize or take a species designated as threatened or endangered by the state.

**Streambed Alteration Agreement (California Fish and Game Code, Section 1600).** The CFGC requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or their tributaries, or use materials from a streambed to submit a notification for a Streambed Alteration Agreement to the CDFW.

**California Fish and Game Code, Section 1602.** Section 1602 regulates water resources in the State of California. Activities that divert or obstruct the natural flow of or change or use material from the bed, channel, or bank of any river, stream, or lake may be authorized by the CDFW. CDFW jurisdiction includes intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated or to the limit of the adjacent riparian vegetation, located contiguous to the watercourse, if the stream or lake is vegetated.

**California Fish and Game Code, Sections 2080 and 2081.** Section 2080 of the CFGC states that "no person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [California Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081 of the CFGC, the CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding if the take is incidental to an otherwise lawful activity, the impacts of the authorized take are minimized and fully mitigated, the permit is consistent with

any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by the CDFW.

**California Fish and Game Code, Section 3503, 3503.5, 3513, and 3800.** Section 3503 prohibits the take, possession, or needless destruction of the nests or eggs of any birds except as otherwise provided by the code or any regulation made pursuant thereto.

Section 3513 of the CFGC upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA.

Section 3800 of the CFGC affords protection to nongame birds, which are birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds.

**CEQA Guidelines, Section 15380(b), as amended (California Public Resources Code, Section 21000 et seq.).** The goal of CEQA is to assist California public agencies in identifying potentially significant negative environmental impacts caused by their actions and avoiding or mitigating those impacts when feasible.

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines, Section 15380(b), provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the rare or endangered species definition in FESA and Sections 2050 through 2059.26 of the CFGC dealing with rare or endangered plants and wildlife. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either the USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not currently have legal protection of any kind, CEQA calls for an assessment of if any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed as sensitive by the California Natural Diversity Database are considered by the CDFW to be significant resources and fall under the CEQA Guidelines to address impacts. Local planning documents, such as General Plans, often identify these resources as well.

**California Fully Protected Wildlife Species Provision (California Fish and Game Code, Sections 3511, 4700, 5050, and 5515).** California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the CFGC. These statutes prohibit take or possession of fully protected species. The CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species, except very limited project types.

**California Native Plant Protection Act of 1977 (California Fish and Game Code, Sections 1900–1913).** These provisions preserve, protect, and enhance endangered or rare native plants of the state.

**Regional Water Quality Control Board (RWQCB).** The RWQCB regulates impacts to water quality under Section 401 of the CWA. A project must comply with Section 401 of the CWA before the USACE can issue a Section 404 Permit. The RWQCB will issue a Section 401 Water Quality Certification or Waiver of Certification, depending on the extent of impacts to waters of the United States. The RWQCB also regulates impact to waters of the state (usually limited to "isolated" waters or swales that may not fall under USACE jurisdiction) under the Porter-Cologne Act.

**Natural Community Conservation Planning Act (NCCP), as amended (California Fish and Game Code, Sections 2800–2835).** The primary objective of the Natural Community Conservation Planning Act (NCCP) is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listing by focusing on the long-term suitability of wildlife and plant communities and including key interests in the process.

**Porter-Cologne Water Quality Control Act.** Regulated by the RWQCB for impacts to waters of the state. Although water quality issues related to impacts to waterways are normally addressed in a Section 401 Water Quality Certification, should a water of the State of California be determined by the USACE not to have CWA jurisdiction, the Porter-Cologne Act would be addressed under a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending on the level of impact and the properties of the waterway.

## 4.3 Local

### 4.3.1 2010 General Plan (Inland)

#### Land Use Element

The 2010 General Plan Land Use Element includes goals and policies for orderly growth that is compatible with and limits development in natural resource areas, including sensitive vegetation communities, aquatic resources, and wildlife habitat, in the County (Goal LU-1 and Policies LU-1.5, LU-1.13). The Element also includes goals and policies establishing land use designations for the County's sensitive natural areas (Goal LU-2 and Policies LU-2.2, LU-2.34[c]) and encourages the provision of open space to protect and conserve biological resources in the County (Goal LU-7, Policy LU-7.2, Goal LU-8, and Policies LU-8.4 through LU-8.6).

#### *Conservation and Open Space Element*

The 2010 General Plan Conservation and Open Space Element includes goals and policies to project and conserve natural environments, listed species, and critical habitat (Goal OS-4 and Policies OS-4.1 through OS-4.3). This Element also includes goals and policies establishing

requirements for development to avoid, minimize, and mitigate for impacts on the sensitive biological resources in the County (Goal OS-5 and Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24 and OS-5.25).

## Area and Master Plans

In addition to the above General Plan goals and policies, the following Area and Master Plans have supplemental policies related to biological resources:

### *Carmel Valley Master Plan*

Policies CV-1.3, CV-3.4, CV-3.7 through CV-3.12, and CV-3.15 of the Carmel Valley Master Plan require the provision of open space, minimization of hillside and natural landform alteration, and support the protection and preservation of biological resources in the planning area. In particular, Policy CV-3.7 requires that areas of biological significance are identified and preserved as open space.

### *Central Salinas Valley Area Plan*

This area plan does not include supplemental policies to the General Plan that are applicable to biological resources.

### *Greater Monterey Peninsula Area Plan*

Policies GMP-1.5 and GMP-3.5 through GMP-3.10 of the Greater Monterey Peninsula Area Plan limit types of development in environmentally sensitive areas and prescribes setback requirements for wetlands in the planning area. Protection and preservation of native trees, open space, wetlands, plant and wildlife species (including marine birds and mammals), and critical habitats are included in these Policies as well.

### *Fort Ord Master Plan*

#### Land Use Element

The Fort Ord Master Plan Land Use Element Goal supports planned development that balances opportunities for growth with environmental protection. Specific to biological resources, the Recreation/Open Space Land Use Objectives A and B and Policies A-1, B-1, and B-2 encourage conservations and preservation of natural resources and open space, including establishing linkages and buffers for open space areas.

#### Recreation and Open Space Element

The Fort Ord Master Plan Recreation and Open Space Element Objectives A and C and Policies C-1 and C-2 integrates the Fort Ord open space into existing regional open space and promotes the

goals of the Habitat Management Plan through establishment of an oak tree protection program and the ongoing maintenance and preservation of sensitive resources.

#### Conservation Element

The Fort Ord Master Plan Conservation Element specifies objectives and policies pertaining to protection and preservation of Hydrology and Water Quality (Objective C) and Biological Resources (Objective A through E) in the planning area. Hydrology and Water Quality Objective C and Policies C-2 and C-4 through C-6 outline requirements for development and facilities operations to avoid impacts on waterways, including the Monterey Bay and intertidal environments. Biological Resources Objective A and Policies A-1, A-5, A-6, and A-9 require conformance with the Fort Ord Habitat Management Plan habitat preservation, protection, and management. Biological Resources Objectives B and C and Policies B-1 through B-3 and C-1 through C-3 require avoidance and minimization of sensitive species and habitats not addressed in the Habitat Management Plan as well as natural land features and habitats like native oak trees and woodlands. Biological Resources Objectives D and E and Policies D-1 and E-2 include requirements for the promotion of educational programming and monitoring of activities in sensitive natural areas.

### *Greater Salinas Area Plan*

#### Conservation/Open Space

The Greater Salinas Area Plan Conservation/Open Space Policy GS-3.1 encourages avoidance of disturbance for all vegetation on land exceeding 25 percent slope, particularly chaparral and broad leaf evergreen, to minimize erosion and retain important visual amenities.

### *North County Area Plan (Inland)*

#### Conservation/Open Space

The North County Area Plan Conservation/Open Space Policies NC-3.3 through NC-3.5 prioritizes conservation of native vegetation and native oak and madrone trees, and encourages the preservation of critical habitat as open space.

### *Toro Area Plan*

#### Conservation/Open Space

The Toro Area Plan Conservation/Open Space Policies T-3.5 and T-3.7 outline requirements for outdoor lighting to preserve the quality of darkness and discourage the removal of healthy native oak trees.

## Community Plans

In addition to the above General Plan and Area and Master Plans goals and policies, the following Community Plan has supplemental goals policies related to biological resources:

### *Castroville Community Plan*

#### Resource Protection and Enhancement

The Castroville Community Plan Resource Protection and Enhancement Goal 5 and Policy 5.1 encourage the protection and enhancement of natural resources, including sloughs in the planning area.

## Monterey County Local Coastal Program – Land Use Plans

The Coastal Act requires local governments to prepare Local Coastal Programs (LCPs) consistent with the Coastal Act (California Public Resources Code, Section 30000 et seq.) for the portion of the statewide Coastal Zone located within their jurisdiction.

A portion of Monterey County is designated as a "Coastal Zone." The Coastal Zone of the County is divided into four areas governed by Land Use Plans (LUP) and Coastal Implementation Plans (CIP), which together comprise the LCP for Monterey County.

The four LUPs include the following:

- North County Land Use Plan
- Big Sur Coast Area Land Use Plan
- Carmel Area Land Use Plan
- Del Monte Forest Land Use Plan

The County is the main authority for issuing most coastal development permits in the County's coastal areas, with the CCC retaining jurisdiction over specific areas, such as tidelands, public trust lands, and state parks. Additionally, the Commission holds appellate authority over certain categories of development, ensuring compliance with broader coastal policies.

The CIPs establish various development regulations, standards, and procedures to implement the policies of the LUPs.

Under the Monterey County LCP, the LUPs policies and recommended actions that apply to the biological resources, including sensitive vegetation communities, aquatic resources, and wildlife habitat, in the project area are detailed in the sections below.

### *North County Land Use Plan (Coastal)*

The Resource Management Key Policy 2.3.1, General Policies 2.3.2, and Specific Policies 2.3.3 of the North County Land Use Plan support the protection, maintenance, enhancement, and

restoration of environmentally sensitive habitats in the planning area. For instance, Specific Policies 2.3.3 limits public access to areas of rare, endangered and sensitive plants and protects environmentally sensitive habitats from livestock grazing and fuel reduction programs. Provisions for the protection of riparian, wetland, aquatic habitats, terrestrial wildlife, and marine resources are also included in Specific Policies 2.3.3. Key Policy 2.4.1, General Policies 2.4.2, and Specific Policies 2.4.3 supports the protection of important biological habitats, drainage patterns, and the scenic character of coastal, river, and estuarine shorelines from diking, dredging, and filling activities. The quality of water resources in the planning area is protected under Key Policy 2.5.1, General Policies 2.5.2, and Specific Policies 2.5.3.

#### *Carmel Area Land Use Plan*

The Resource Management Key Policy 2.3.2, General Policies 2.3.3, and Specific Policies 2.3.4 of the Carmel Area Land Use Plan support the protection, maintenance, enhancement, and restoration of environmentally sensitive habitats in the planning area. For instance, Specific Policies 2.3.4 limits the use of and access to rare and sensitive terrestrial plant and wildlife habitats, including riparian corridors, Monterey cypress, Monterey pine, and coast redwood forest, and establishes setbacks from streams and riparian communities. Provisions for the protection of marine habitats are also included in Specific Policies 2.3.4. Key Policy 2.4.2, General Policies 2.4.3, and Specific Policies 2.4.4 support the protection of water resources like rivers and streams. Scenic and natural resources in the planning area are protected by limiting the density of new development and public access, including maintenance and creation of trails, under Key Policies 4.4.1 and 5.3.1, General Policies 4.4.2, and Specific Policies 4.4.3 and 5.3.3.

### 4.3.2 Monterey County Code

The Monterey County Code (County Code) ordinances applicable to biological resources in Monterey County inland and coastal areas are described in the sections below. Of the County ordinances listed below, those that are applicable to biological resources in the Monterey County Coastal Zone include: Title 16 Environment (Chapters 16.08 Grading, 16.12 Erosion Control, 16.14 Urban Stormwater Quality Management and Discharge Control, and 16.16 Regulation for Flood Plains in Monterey County); and Title 20 Coastal Zoning.

#### *Title 16 – Environment*

##### Chapter 16.08 – Grading.

This ordinance sets forth rules and regulations to control all grading, establishes the administration procedure for issuance of permits, and provides for approval of plans and inspections of grading construction to minimize erosion, protect fish and wildlife, and to otherwise protect the natural environment of Monterey County.

**Chapter 16.12 – Erosion Control.**

This ordinance specifies requirements to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, loss of fish habitat, damage to property, loss of topsoil or vegetation cover, disruption of water supply, increased danger from flooding.

**Chapter 16.14 – Urban Stormwater Quality Management and Discharge Control.**

This ordinance provides the County with the legal authority to control the entry of urban pollutants into stormwater runoff that may enter the County storm drain system and enhance watercourses within the unincorporated urbanized areas in compliance with the CWA and the Porter-Cologne Act.

**Chapter 16.16 – Regulations for Floodplains in Monterey County.**

This ordinance specifies regulations for floodplains in UMC. The purpose of the ordinance is to minimize public and private losses due to flood conditions in specific areas and is a requirement for continued participation in the Federal Emergency Management Agency (FEMA) National Flood Insurance Program.

### *Title 20 – Coastal Zoning*

Section 20.66.020 of the Coastal Zoning Ordinance refers to Part 2 (North County) and Part 4 (Carmel) of the Monterey County CIP for standards for environmentally sensitive habitats.

### *Coastal Implementation Plan*

North County (Part 2) 20.144.040 (Environmentally Sensitive Habitat Development Standards) of the Coastal Implementation Plan provides development standards that support the protection, maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats in the planning area. This section requires a biological survey for proposed development that meets a set of criteria related to proximity to environmentally sensitive habitats and outlines general and specific development standards that aim to protect sensitive resources, including terrestrial plant and wildlife habitats, riparian, wetland and aquatic habitats, and marine habitats.

North County (Part 2) Section 20.144.050 (Forest Resource Development Standards) of the Coastal Implementation Plan requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forester's Assessment and Recommendation shall be required for removal of three or more trees requiring a coastal development permit or proposed as part of a development where the tree removal would otherwise require a coastal development permit. Section 20.144.050(C) provides specific development standards for tree removal activities.

Carmel Area (Part 4) 20.146.040 (Environmentally Sensitive Habitat Development Standards) of the Coastal Implementation Plan provides development standards that support the protection,

maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats in the planning area. This section requires a biological survey for all proposed development and outlines general and specific development standards that aim to protect sensitive resources, including terrestrial plant and wildlife habitats, riparian corridors, and wetland and marine habitats.

Carmel Area (Part 4) 20.146.050 (Water and Marine Resources Development Standards) of the Coastal Implementation Plan provides development standards that support the protection of protect the water quality of the coastal streams and the Point Lobos and Carmel Bay areas of Special Biological Significance in the planning area. This section requires adequate setbacks from streams, stream flow maintenance, performance controls for development site features, maintenance of water quality, protection of natural vegetation along streams and control of grading to minimize erosion and sedimentation.

Carmel Area (Part 4) Section 20.146.060 (Forest Resource Development Standards) of the Coastal Implementation Plan requires a coastal development permit for the removal of trees and other major vegetation, except in certain circumstances (e.g., small, diseased, or hazardous trees). A Forest Management Plan is required for tree removal requiring a coastal development permit or for development requiring a coastal development permit where the development includes native tree removal of size or amount. Section 20.146.060(D) provides specific development standards for tree removal activities.

### *Title 21 – Zoning (Inland)*

#### Chapter 21.64.130 – Regulations for Land Use in the Carmel Valley Floodplain.

The purpose of this ordinance is to protect the Carmel River and its corridor including visual aspects, value as wildlife habitat and stabilize the river channel; preserve the rural character of Carmel Valley; and promote the public health and safety by lessening local flood potential and flood related hazards.

#### Chapter 21.64.260 – Preservation of Oak and Other Protected Trees.

The purpose of this ordinance is to provide the regulations for the protection and preservation oak and other specific types of trees as required in the Monterey County General Plan, Area Plans, and Master Plans. This ordinance also provides the procedures under which proposed removal of such trees may be considered or exempted.

#### Section 21.66.020, Standards for Environmentally Sensitive Habitats.

The purpose of this ordinance is to provide development standards which will allow for the protection, maintenance, and, where possible, enhancement and restoration of environmentally sensitive habitats. This provision requires a biological survey to be conducted as described below

in areas known by available resource information, review or other research, to contain environmentally sensitive habitats. Compliance with this provision is required as a condition of approval for projects in the County.

**Section 21.66.020 (C). Regulations: Biological Survey Requirement.**

1. A biological survey shall be required for all proposed development meeting one or more of the following criteria:
    a. The development is proposed within a known environmentally sensitive habitat, based on the most current resource maps, other reliable other available resource information, or through the planner's on-site investigation;
    b. The development is located within one hundred (100) feet of an environmentally sensitive habitat, and has potential negative impact on the long-term maintenance of the habitat.
        1. The survey shall be required, submitted, and meet approval of the Director of Planning prior to the project application being determined complete.
        2. The survey shall be prepared by a qualified biologist, as selected from the County's list of consulting biologists maintained by the Planning Department. Report preparation shall be at the applicant's expense.
        3. The biological survey shall contain the following elements:
            a. Identify the property surveyed, with accompanying location map and site plan showing topography and all existing and proposed structures and roads, and the proposed project site or sites;
            b. Describe the method of survey;
            c. Identify the environmentally sensitive habitat found on the site and within one hundred (100) feet of the site with an accompanying map delineating the habitat location or locations;
            d. Describe and assess potential impacts of the development on the environmentally sensitive habitat(s) identified in the survey found on the site or on neighboring properties;
            e. Recommend mitigation measures which will reduce impacts;
            f. Assess whether the mitigation measures will reduce the development's impact to an insignificant level.

## Section 5 Thresholds of Significance

Appendix G of the CEQA Guidelines (CEQA Guidelines, Section 15000 et seq.) defines "significant effect on the environment" as a "substantial, or potentially substantial adverse change in the environment." Appendix G of the CEQA Guidelines further indicates that there may be a significant effect on biological resources if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

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## Section 6 Impacts

Impacts to biological resources from implementation of the project are categorized quantitatively as direct and indirect impacts.

Direct impacts to biological resources occur when significant alterations or destruction occurs during the course of, or because of, project implementation. Examples of such impacts include removing, disturbing, or grading vegetation; dredging or grading a stream bank; filling wetlands with any materials; erecting any structures, including in a stream; and severing or physically restricting wildlife corridors and the distribution of individual species or resources. Other direct impacts may include loss of foraging or nesting habitat and loss of individual species as a result of habitat clearing.

Indirect impacts may include elevated levels of noise or lighting, change in surface water hydrology within a floodplain, and increased erosion or sedimentation. These types of indirect impacts can affect vegetation communities or their potential use by sensitive species. They can also cause the disruption of normal wildlife functions or activities, impacting individual species.

Within the direct and indirect quantitative impacts categories, impacts are also qualified temporally as permanent and temporary impacts.

Permanent impacts may result in irreversible damage to biological resources, including habitat or removal of species from a particular area.

Temporary impacts are interim changes in the local environment due to construction and would not extend beyond project-associated construction, including revegetation of temporarily disturbed areas adjacent to native habitats.

As previously stated in Section 2, development on the entitled/proposed pipeline sites (Sites 57 through 63) would occur independently of project implementation and, therefore, are not considered part of the project's impacts. Thus, the entitled/proposed pipeline sites are not included in this section.

An analysis of the exact acreage of direct impacts that would occur on biological resources, including sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages, in the project area from project implementation is not provided at the programmatic level. This is because such an analysis would be speculative in nature since focused surveys were not conducted, and future site-specific project designs are not known at this time.

## 6.1 Threshold 1: Sensitive Plant and Wildlife Species

### 6.1.1 Guidelines for Determination of Significance

Significant impacts to sensitive plant and wildlife species could result if the project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW and USFWS.

### 6.1.2 Impacts Analysis

#### 6.1.2.1 Sensitive Plant Species

**Direct Impacts**

As previously discussed, no biological surveys or focused species surveys were conducted as a part of this programmatic project. A total of 35 sensitive plant species have been documented by historical literature and databased within 1 mile of the project area (refer to Table 2, Sensitive Plant Species Documented in the Project Area, and Figure 7 series).

Implementation of the project on opportunity sites comprised only of urban/developed land and agricultural land totaling 52 opportunity sites (Opportunity Sites 2, 3, 5, 6, 17, 23, 25 through 30, 33 through 36, 39, 41, 49, 50, 51, 54, 55, and 64; refer to Table 1) have a low potential to impact sensitive plant species because it provides little to no suitable habitat value for the sensitive plant species documented in the project area. However, implementation of the project on undeveloped opportunity sites or those that contain native vegetation communities have higher potential to impact sensitive plant species. While suitable habitats for the historically documented sensitive plant species are present in the project area, many of these species have specific microhabitat requirements, including soils and elevation range restrictions, that may reduce the potential for these species to occur on a particular site.

The aquatic habitats present in the project area (Opportunity Sites 11 through 15, 24, and 56; refer to Table 1), including freshwater and freshwater marsh, have the potential to support sensitive plant species documented in the project area, including Fort Ord button-celery.

The woodland and forest communities of mixed conifer forest and oak woodland throughout the project area (Opportunity Sites 8, 9, 10, 16, 20, 21, 22, 31, 37, 40, 43, 45, 46, 48, 52, 53, and 56; refer to Table 1) have the potential to support sensitive plants documented in the project area, including but not limited to Hickman's onion, Toro manzanita, sandmat manzanita, Kellogg's horkelia, northern curly-leaved monardella, pine rose, Monterey pine, and Yadon's rein orchid.

The upland vegetation communities of annual grassland and coastal scrub present in the project area (Opportunity Sites 1, 4, 8 through 12, 14, 15, 18, 19, 20, 21, 22, 31, 32, 37, 38, 42, 44, 46, 47,

48, 52, and 53; refer to Table 1) provides suitable habitat for many of the same sensitive plant species supported by the woodland and forest communities listed previously, as well as Pajaro manzanita, Jolon clarkia, Congdon's tarplant, Monterey spineflower, seaside bird's-beak, fragrant fritillary, Santa Cruz microseris, and Pacific grove clover, among others.

As noted in Section 4.3.2, County of Monterey Development Standards (Title 21, Zoning, Chapter 21.66), the project is required to implement a biological survey requirement in compliance with the provision set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of sensitive vegetation communities that could support sensitive plant species, including (but not limited to) Opportunity Sites 1, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 31, 32, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 52, 53, and 56 (totaling 32 opportunity sites), a biological survey is required to be conducted to determine the presence of sensitive vegetation communities and sensitive plant species. Further, for these opportunity sites that are in the Carmel Area and North County Coastal Land Use Planning Areas, including Opportunity Sites 16, 43, and 48, projects would be regulated under Coastal Zoning Ordinance of the County Code. Project construction on these coastal sites would be required to comply with the provisions set forth in Section 20.66.020 of the of the County Code specific to coastal development in the Carmel Area and North County (Coastal). These provisions also require a biological survey for all proposed development in the Carmel Area and for development in North County (Coastal) that contains or is within proximity to sensitive habitats.

If the results of the biological survey required under County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and Mitigation Measure (MM)-BIO-OBJ-1 determine that sensitive plant species are not present and do not have a high potential to occur in the project opportunity sites, direct impacts on sensitive plant species would be less than significant, and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat and avoidance is not feasible, direct impacts on sensitive plant species would be considered potentially significant without additional mitigation.

Therefore, MM-BIO-OBJ-1 and MM-BIO-CONS-2 have been provided to reduce potential impacts on sensitive plant species through conducting focused sensitive plant species surveys prior to construction of the project. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts on sensitive plant species through monitoring by a qualified biologist prior to and during construction of the project. Implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6 would require discretionary projects to conserve or restore vegetation communities potentially occupied by sensitive plant species. Implementation of MM-BIO-OBJ-1, MM-BIO-

CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would be required to reduce potential direct impacts on sensitive plant species. Discretionary projects that streamline under the Consistency Process, will, with implementation of the mitigation measures listed above, have their potential impacts to biological resources reduced to less than significant levels.

Projects requiring mitigation for temporary and permanent impacts to vegetation communities can streamline under the Objective Process even if the future residential project requires coordination with CDFW following entitlement, with implementation of MM-BIO-OBJ-1 and MM-BIO-OBJ-3. However, because state law and the HEU6 require certain uses by right, and the County is barred from requiring CEQA review for a "use by right", impacts on sensitive plant species from Objective Process projects would remain significant and unavoidable.[1] Refer to section 3.7.3, By-Right Development, for a discussion of use by right.

### Indirect Impacts

Temporary indirect impacts on sensitive plant species could result during project implementation, and may include dust, which could disrupt plant vitality in the short-term, or construction-related soil erosion and runoff. Permanent edge effects, which are changes that occur at the boundary between two different communities or habitats (i.e., native habitat and urban/developed land), could result during operation of the project. These edge effects may include intrusions by humans and therefore possible trampling of individual plants, invasion by exotic plant and wildlife species, exposure to urban pollutants (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrologic changes (e.g., surface and groundwater level and quality).

Like the discussion under Sensitive Plant Species, Direct Impacts, if the results of the biological survey required by County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and Mitigation Measure (MM)-BIO-OBJ-1 determine that sensitive plant species are not present and do not have a high potential to occur in the project opportunity sites, indirect impacts on sensitive plant species would be less than significant, and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat and avoidance is not feasible, indirect impacts on sensitive plant species would be considered potentially significant without additional mitigation.

The project would be required to be in compliance with state and local regulations controlling erosion and stormwater runoff, including the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provisions, which would trigger preparation and compliance with an

[1] The Notice of Availability published in the Monterey County Weekly (dated July 17, 2026) stated that impacts related to Biological Resources were less than significant with mitigation incorporated. This was erroneous. The Notice of Availability provided to the CEQA State Clearinghouse has been updated to note that impacts related to Biological Resources are significant and unavoidable, as described in this Section of the PEIR.

approved Stormwater Pollution Prevention Plan that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions to minimize any water quality and erosion impacts that could result during construction. In addition, the project would be subject to the County Code, Chapters 16.08 Grading, 16.12 Erosion Control, 16.14 Stormwater Control, and 16.16 Regulation for Flood Plains which require implementation of BMPs to control the discharge of pollutants to the maximum extent practicable, compliance with the state Construction General Permit, elimination of non-stormwater discharges that are not in compliance with an applicable NPDES permit, and development and approval of a project-specific erosion control plan prior to the start of any grading or clearing. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on sensitive plant species from erosion, polluted runoff, and hydrologic changes would be less than significant, and no mitigation is required.

However, indirect impacts on sensitive plant species from edge effects and increased human activity could result. Therefore, indirect impacts on sensitive plant species during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would be required to reduce potential impacts, however, because the County is required to process certain uses by right the project could result in a significant and unavoidable impact.

#### 6.1.2.2 Sensitive Wildlife Species

### Direct Impacts

No biological surveys or focused species surveys were conducted as a part of this project. A total of 26 sensitive wildlife species have been documented by historical literature and databased in the project area (refer to Table 3, Sensitive Wildlife Species Documented in the Project and Figure 7 series).

Implementation of the project on opportunity sites with urban/developed land (Opportunity Sites 5, 6, 17, 23, 27 through 30, 33 through 36, 39, 41, 49, 51, 54, 55, and 64; refer to Table 1) has a low potential to impact sensitive wildlife species because it provides little to no suitable habitat value for the sensitive wildlife species documented in the project area. However, the ornamental trees and shrubs and structures present in the urban/developed land could provide suitable foraging and roosting habitat for sensitive bats documented in the project area, including Townsend's big-eared bat. Foraging and overwintering habitat for monarch butterfly could also be present in any large stands of ornamental trees, specifically coastal groves of eucalyptus, cypress, and pine, that occur in the urban/developed land. Direct impacts on the trees, shrubs, and structures in the urban/developed land of the project area could result in direct impacts on these species in the form of foraging, nesting, roosting, and overwintering habitat loss.

Implementation of the project on undeveloped opportunity sites or those that contain agricultural land and native vegetation communities have the potential to impact sensitive wildlife species.

Although the agricultural land throughout the project area (Opportunity Sites 1 through, 4, 14, 15, 19, 20, 21, 22, 24, 25, 26, 37, 48, and 50; refer to Table 1) is unlikely to support most of the historically documented sensitive wildlife species, species like western burrowing owl, American badger, and San Joaquin kit fox have adapted to frequently use highly cultivated and disturbed areas such as agricultural lands for burrowing (if suitable burrows and soil conditions are available) and as movement corridors.

The aquatic habitats present in the project area (Opportunity Sites 11 through 15, 24, and 56; refer to Table 1), including freshwater and freshwater marsh, have the potential to support sensitive fish and amphibian species documented in the project area, including Monterey hitch, Santa Cruz long-toed salamander, and California red-legged frog, among others. These aquatic communities also provide suitable habitat for sensitive reptiles like northwestern pond turtle and southwestern pond turtle, as well as nesting habitat for sensitive birds like tricolored blackbird and yellow rail.

The woodland and forest communities of mixed conifer forest and oak woodland throughout the project area (Opportunity Sites 8, 9, 10, 16, 20, 21, 22, 31, 37, 40, 43, 45, 46, 48, 52, 53, and 56; refer to Table 1) support sensitive reptiles, birds, and mammals documented in the project area, including but not limited to Blainville's (coast) horned lizard, American badger, and Monterey dusky-footed woodrat.

No riparian forest habitat occurs in the opportunity sites. Therefore, no impacts would occur to the sensitive wildlife species potentially occurring in riparian forest habitat, including Santa Cruz long-toed salamander, foothill yellow-legged frog (South Coast DPS), Blainville's (coast) horned lizard, least Bell's vireo, American badger, Monterey dusky-footed woodrat, and Monterey shrew.

The upland vegetation communities of annual grassland, chaparral, and coastal scrub present in the project area (Opportunity Sites 1, 4, 8 through 12, 14, 15, 18 through 22, 31, 32, 37, 38, 42, 44, 46, 47, 48, 52, and 53; refer to Table 1) provides suitable habitat for sensitive invertebrates, reptiles, birds, and mammals documented in the project area. These sensitive wildlife species include Smith's blue butterfly, coast range newt, western burrowing owl, California horned lark, mountain lion, American badger, Monterey shrew, and San Joaquin kit fox, among others.

As noted in Section 4.3.2, the project would implement a biological survey requirement in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2. Thus, prior to project construction on opportunity sites that contain sensitive vegetation communities or those that could support sensitive wildlife species (such as agricultural land), including Opportunity Sites 1 through 4, 8 through 16, 18 through 22, 24, 25, 26, 31, 32, 37, 38, 40, 42 through 48, 50, 52, 53, and 56, a biological survey would be conducted to determine the presence of sensitive vegetation communities and sensitive wildlife species.

If the results of the biological survey determine that sensitive wildlife species are not present and do not have a high potential to occur in the project opportunity sites, direct impacts on sensitive wildlife species would be less than significant, and no additional mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential to occur in the project opportunity sites due to available suitable habitat and avoidance is not feasible, direct impacts on sensitive wildlife species would be considered potentially significant without additional mitigation.

Therefore, MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required to reduce potential direct impacts on sensitive wildlife species through conducting sensitive bird and wildlife species focused surveys prior to construction. If impacts on sensitive wildlife species and their occupied habitats cannot be avoided, the biological resources survey and reporting shall identify all feasible measures to reduce impacts. Implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6 would be required to conserve and restore vegetation communities potentially occupied or used by sensitive wildlife species, thereby reducing impacts on wildlife species. Projects requiring mitigation for sensitive wildlife species and their occupied habitats can streamline under the Objective Process by identifying all sensitive habitat, the quality of that habitat, the presence or absence of sensitive wildlife species, and providing protective measures and adequate ratios for habitat replacement. Further, if "take" of a species is required by a project, that project must coordinate to obtain the necessary "take" permits with CDFW following entitlement. Discretionary projects that streamline under the Consistency Process, will, with implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6, have their potential impacts to biological resources reduced to less than significant levels. Additionally, implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts on sensitive wildlife species, such as sensitive roosting bats, through monitoring by a qualified biologist prior to and during construction of the project. Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-CONS-5, and MM-BIO-CONS-6 would be required to reduce potential direct impacts on sensitive wildlife species. However, because the County must process certain uses by right, the project would likely result in a potentially significant unavoidable impact.

### *Nesting Birds*

The project area provides suitable nesting habitat for birds and raptors protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the project. If construction activities begin during the general bird and raptor nesting season (January 15 through September 15), the project would be required to implement regulations protecting sensitive nesting birds, including the CFGC and MBTA. Furthermore, MM-BIO-OBJ-7 and MM-BIO-CONS-8 would require focused bird species surveys to determine presence/absence. If impacts cannot be avoided, MM-BIO-OBJ-7 and MM-BIO-CONS-8 would

reduce potential impacts on nesting birds and raptors by requiring a no-disturbance buffer around any active nest. MM-BIO-OBJ-3 and MM-BIO-CONS-4 would reduce potential impacts through monitoring by a qualified biologist prior to and during construction of the project. Therefore, impacts on nesting birds and raptors would be less than significant with implementation of MM-BIO-OBJ-3, MM-BIO-CONS-4, MM-BIO-OBJ-7, and MM-BIO-CONS-8.

#### *Sensitive Roosting Bats*

As previously discussed, suitable roosting habitat for sensitive bat species, including Townsend's big-eared bat and western red bat, occurs in the structures and trees throughout the project area. Although no focused nighttime mist-netting or acoustic surveys were conducted, the availability of suitable roosting with nearby foraging habitat suggests that bats are likely roosting in the project area. Therefore, if sensitive roosting bats are present in the opportunity sites of the project area, potential impacts would be considered potentially significant without mitigation. If impacts cannot be avoided, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 would be required to reduce potential impacts on sensitive roosting bats through monitoring by a qualified biologist prior to and during construction and conducting sensitive wildlife species focused surveys prior to construction of the project. With implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4, impacts on sensitive roosting bats would be less than significant.

#### *Critical Habitat*

Critical habitat for Monterey spineflower, Santa Cruz tarplant, vernal pool fairy shrimp, tidewater goby, California red-legged frog, California tiger salamander, and western snowy plover occurs in the project area (Figure 8 series). Although most of the critical habitat for these seven species (two plant species and five wildlife species) occurs outside the opportunity sites in the project area, designated critical habitat for California red-legged frog occurs within the project Opportunity Sites 23, 36, 38, 55, and 56 (Figure 8 series). Therefore, potential impacts to this sensitive species in its designated critical habitat could occur during implementation of the project on these opportunity sites and would be considered potentially significant without mitigation.

Like the discussion under Sensitive Wildlife Species, Direct Impacts, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine that suitable habitat for California red-legged frog is not present in the project opportunity sites where designated critical habitat is documented (including project Opportunity Sites 23, 36, 38, 55, and 56), direct impacts on this sensitive species in its designated critical habitat would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that suitable California red-legged frog habitat is present in the project opportunity sites where designated critical habitat is

documented, direct impacts on designated critical habitat for California red-legged frog would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would be required to reduce impacts on critical habitat to a less than significant level. However, because the County must process certain uses by right, the Objective Process could result in significant and unavoidable impacts at the programmatic level.

### Indirect Impacts

Temporary construction-related and long-term operational indirect impacts on wildlife generally include lighting, increased human activity (including introduction of pets as predators), hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash and garbage, which can attract both introduced terrestrial and native terrestrial and bird predators (such as American crows, common ravens [*Corvus corax*], coyotes [*Canis latrans*], domestic dogs [*Canis familiaris*], raccoons [*Procyon lotor*], and striped skunks [*Mephitis mephitis*]). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species historically documented in the project area, identified in Section 3.3.2, Sensitive Wildlife Species, and discussed under Direct Impacts in Section 6.1.2.2.

As discussed in the section on Sensitive Wildlife Species, Direct Impacts, if the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), as well as MM-BIO-OBJ-1 and MM-BIO-CONS-2, finds that sensitive wildlife species are neither present nor have a high potential to occur in the project opportunity sites, indirect impacts on sensitive wildlife species would be less than significant; no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential to occur in or adjacent to the project opportunity sites due to available suitable habitat, indirect impacts on sensitive wildlife species could occur.

Indirect impacts on sensitive wildlife species from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Similarly, the project would conform with the County Code, Chapter 10.60, Noise Control, and implement BMPs for the use of noise- and vibration-emitting equipment during construction. Further, compliance with the County Code, Chapter 10.60, Noise Control, would restrict the hours of construction activity and include a noise level limit to minimize disturbance from construction noise. Potential indirect impacts on sensitive wildlife species from new sources of lighting during construction and operation would be reduced through project compliance with County Code, Section 21.63.020, Design Guidelines for Exterior Lighting, which requires temporary

construction lighting and permanent exterior lighting are unobtrusive, avoid off-site glare, and illuminate only the intended area.

However, indirect impacts on sensitive wildlife species from lighting, excessive noise and vibration, increased human activity, and potential predation by mesocarnivores attracted by trash and garbage could result. Therefore, indirect impacts on sensitive wildlife during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3, MM-BIO-CONS-4, (from PEIR Section 4.13, Noise) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction and BMPs to reduce construction noise and vibration in compliance with the County Code, Chapter 10.60, Noise Control.

### 6.1.3 Mitigation Measures

For by-right housing developments streamlining under the Objective Process, Mitigation Measures (MM) MM-BIO-OBJ-1, MM-BIO-OBJ-3, and MM-BIO-OBJ-7 shall be required to reduce potentially significant impacts on sensitive plant and wildlife species to the extent feasible. However, the County must process certain uses by right and cannot guarantee that impacts would be reduced to a level below significance.

For developments streamlining under the Consistency Process, MM-BIO-CONS-2, MM-BIO-CONS-4 through MM-BIO-CONS-6, and MM-BIO-CONS-8 shall be required to reduce potentially significant impacts on sensitive plant and wildlife species.

#### Sensitive Plant Species

**MM-BIO-OBJ-1: Biological Resources Survey and Protection Measures**. Prior to subsequent project-level approval and prior to any construction or grading activities, as required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the Monterey County Code, applicants for projects streamlining under the Objective Process on opportunity sites shall retain a qualified biologist, as approved by the County of Monterey (County), to conduct a biological survey documenting the biological resources, including environmentally sensitive habitats, sensitive plant and wildlife species, and jurisdictional aquatic resources, found on the site and within 100 feet of the site.

As identified in California Department of Fish and Wildlife Section 1600 permit standards, the qualified biologist is an individual who holds, at a minimum, a bachelor's degree from an accredited university in a scientific field and shall:

- be knowledgeable and experienced in the biology and natural history of local plant and wildlife resources;
- be able to identify resources that are or have the potential to be present at the project site;

- have previous biological monitoring experience on construction projects;
- for any required nesting bird surveys, the biologist must have at least three years of field experience conducting general and protocol level surveys related to finding nests and monitoring them for the specific purpose of determining breeding status, egg incubation, chick maturity, and estimating fledge date;
- have the necessary experience and/or certifications for conducting protocol and focused surveys for species that may be present in the project area;
- when needed, have obtained the proper handling authorization documentation.

The project-specific biological evaluations shall be conducted using the best available scientific information, including documented species occurrences, applicable database records, habitat suitability, field reconnaissance, and project-specific site conditions, to evaluate the potential for sensitive, special-status, federally or state-listed, candidate, or otherwise protected species to occur on the site and within 100 feet of the site.

The qualified biologist shall document the survey results in a memorandum with maps, consistent with the requirements of Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), that is signed attesting that there are no sensitive biological resources present on the project site or that if present, they shall be avoided. The County shall review the memorandum and maps to confirm that no sensitive biological resources are present or that if present, they are avoided.

Where suitable habitat is present, sensitive species have the potential to occur, are documented within or adjacent to the project area, or are otherwise reasonably suspected to be present based on habitat conditions or field observations, the qualified biologist shall determine whether habitat assessments and species-specific focused and/or protocol surveys are warranted based on the project characteristics, anticipated impacts, applicable regulatory requirements, and current agency guidance. Where warranted, surveys shall be conducted in accordance with applicable federal, state, and local regulations, agency-approved protocols, and accepted scientific standards. Survey findings shall be used to determine species presence or probable absence and to inform project design, impact assessment, environmental compliance, agency consultation, permitting, monitoring, and any additional biological evaluation or regulatory actions, as required.

If sensitive biological resources are present on the project site but avoided by project design, a qualified biological resources monitor shall be present when earthwork is within 100 feet of the sensitive biological resource to avoid indirect impacts. Refer to MM BIO-OBJ-3, below, which outlines the biological resources monitoring requirements for projects that qualify for streamlining under the Objective Process.

A. **Demonstrate Conformance with 2010 General Plan and Land Use Plan Policies.** Within 2 years of certification of the PEIR, the County shall conduct a comprehensive review of applicable Goals and Policies in the 2010 General Plan and Land Use Plans for North County and Carmel Area related to Biological Resources. Based on that review, the County shall develop standardized checklists to demonstrate conformance with the identified Goals and Policies. The review shall also identify any Policies that are subjective or discretionary in nature. For such Policies, each standardized checklist shall provide clear criteria to demonstrate compliance for eligible projects. These standards will be required to be discussed in the required Biological Report. The review shall include all applicable topic areas, including but not limited to, the following:

- 2010 General Plan:
  i. *Conservation and Open Space Element* - Policies OS-4.1 through OS-4.3: Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24, and OS-5.25.
  ii. *Land Use Element* – Policies LU-1.5, LU-1.13, LU-2.34(c), LU-7.2, and LU-8.4 through LU-8.6
  iii. *Carmel Valley Master Plan* – CV-1.3, CV-33.4, CV-3.7 through CV-3.12, and CV-3.15
  iv. *Greater Monterey Peninsula Area Plan* – GMP-1.5 and GMP-3.5 through GMP-3.10
  v. *Fort Ord Master Plan* – Land Use Element Policies A-1, B-1, and B-2, Recreation and Open Space Policies C-1 and C-2, Conservation Element Hydrology and Water Quality Policies C-2, C-4, C-6, A-1, A-5, A-6, and A-9; Biological Resources Policies A-1, A-5, A-6, A-9, B-1 through B-3, C-1 through C-3, D-1, and E-2
  vi. *Greater Salinas Area Plan* – Policy GS-3.1
  vii. *North County Area Plan* – Policy NC-3.3 through NC-3.5
  viii. *Toro Area Plan* – Policy T-3.5 and T-3.7
  ix. *Castroville Community Plan* – Policy 5.1
- Land Use Plan Policies:
  i. *North County Land Use Plan* - Key Policy 2.3.1, General Policies 2.3.2, and Specific Policies 2.3.3; Key Policy 2.4.1, General Policies 2.4.2, and Specific Policies 2.4.3; Key Policy 2.5.1, General Policies 2.5.2, and Specific Policies 2.5.3
  ii. *Carmel Area Land Use Plan* - Key Policy 2.3.2, General Policies 2.3.3, and Specific Policies 2.3.4; Specific Policies 2.3.4. Key Policy 2.4.2, General Policies 2.4.3, and Specific Policies 2.4.4; Key Policies 4.4.1 and 5.3.1, General Policies 4.4.2, and Specific Policies 4.4.3 and 5.3.3

B. Applicants for projects that qualify for streamlining under the Objective Process but that would result in unavoidable direct impacts to sensitive vegetation communities shall be required to acquire compensatory credits or implement habitat creation, restoration, enhancement, or preservation that comply with California Department of Fish and Wildlife (CDFW) authorizations at a minimum 1:1 ratio, or a ratio as defined in any state or federal permit(s) issued for the project. Compensatory credits are purchased to compensate for unavoidable impacts to aquatic resources and/or special status species and/or habitat through the conservation and protection of state and/or federally listed threatened, endangered species and/or habitat. Compensatory credits are purchased from banks approved by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, CDFW, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration-National Marine Fisheries Service, and/or State Water Resources Control Board.

   Such potential direct impacts shall be addressed by the applicant prior to both issuance of the first grading or construction permit and any vegetation clearing or ground-disturbing activities within the site-specific areas, pursuant to the below: Compensatory credits shall be redeemed through the acquisition of off-site bank credits via a resource agency-approved site within the site's specific watershed or by acquisition of other off-site credits. The qualified biologist shall provide substantial evidence that the acquisition of other off-site credits is adequate. Prior to implementation of project construction impacts (e.g., vegetation clearing or ground-disturbing activities) that would require the redemption of compensatory credits, documentation demonstrating the availability of such credits (i.e., credit ledger) at the agency-approved bank or other off-site credits must be submitted to the County of Monterey for confirmation.

   1. If credits are not available at either a resource agency-approved site within the site's specific watershed or off-site, implementation of habitat creation, restoration, enhancement, or preservation shall occur through a Habitat Monitoring Plan developed by a qualified biologist. Under this option, an applicant shall cause a Habitat Monitoring Plan to be prepared to achieve no net loss of the resource timed in relation to project impacts. Such a plan shall also comply with applicable federal, state, and local requirements.
   2. The Habitat Monitoring Plan shall include all of the following information:
      - A Conceptual planting plan including planting zones, grading, and irrigation.
      - A Seed mix/planting palette.
      - Planting specifications.

- A Monitoring program prepared by a qualified biologist including success criteria to ensure no net loss of sensitive vegetation communities. Final success criteria shall be determined based on quality, quantity, and type of habitat impacted. The monitoring program shall include measures for adaptive management, detailing required remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, providing supplemental water, replanting, and herbivore deterrents/protections.

  For measures that involve habitat acquisition, the Habitat Monitoring Plan shall include all of the following:

  - The location of proposed acquisition.
  - A description of the biological resources to be acquired, including support for the conclusion that the acquired habitat is adequate for the specific maintenance impact.
  - Documentation that the area would be adequately preserved and maintained in perpetuity.
  - The identification of off-site credits shall be provided to the County of Monterey and shall include the following:
  - The location of the approved site.
  - A description of the off-site credits the applicant intends to acquire, including substantial evidence that the acquired habitat would be adequate to mitigate the project's specific maintenance impact.
  - Documentation of the credits that are associated with a bank, which has been approved by the appropriate resource agencies.
  - Documentation in the form of a current credit ledger.

The County shall approve the Habitat Management Plan if all conditions are met.

If "take" of sensitive habitat or species is required, the applicant shall both obtain an Incidental Take Permit from the California Department of Fish and Wildlife and/or US Fish and Wildlife Service and provide proof of such permit to the County prior to County issuance of the first grading or construction permit.

If the qualified biologist report does not identify adequate measures to replace sensitive habitat as detailed above, the project shall be moved into the Consistency Process, and shall follow MM-BIO-CONS-2, etc., below.

**MM-BIO-CONS-2: Biological Resources Survey**. Prior to subsequent project-level approval and prior to any construction or grading activities for discretionary housing developments

streamlining under the Consistency Process, as required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the Monterey County Code, applicants shall retain a qualified biologist, as approved by the County of Monterey (County), to conduct a biological survey documenting the biological resources, including environmentally sensitive habitats, sensitive plant and wildlife species, and jurisdictional aquatic resources, found on the site and within 100 feet of the site.

Refer to MM-BIO-OBJ-1, above, for all standards and requirements for MM-BIO-CONS-2. If sensitive biological resources are present on the project site but cannot be avoided by project design, a qualified biological resources monitor shall be present when earthwork is in or within 100 feet of the sensitive biological resource to minimize impacts. Refer to MM-BIO-CONS-4, below, which outlines the biological resources monitoring requirements for projects that qualify for streamlining under the Consistency Process. For unavoidable impacts on sensitive plant and wildlife species habitats and sensitive vegetation communities, implementation of MM-BIO-CONS-5 and MM-BIO-CONS-6, below, would be required to compensate for permanent impacts and restore temporary impacts on these habitats.

**MM-BIO-OBJ-3: Qualified Monitoring Biologist.** Prior to the start of construction activities for by-right housing developments streamlining under the Objective Process, as required by mitigation measures recommended by the biological survey report pursuant to County of Monterey Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1, a qualified monitoring biologist shall be retained to implement required monitoring. The qualified monitoring biologist shall be responsible for the following monitoring and reporting tasks:

a. **Biological Construction Monitoring Exhibit.** The qualified monitoring biologist shall submit a Biological Construction Monitoring Exhibit, which includes limits of work, proposed monitoring schedule, bird, focused sensitive species, or other wildlife surveys/survey schedules (including general bird nesting and U.S. Fish and Wildlife protocol), timing of surveys, bird construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the qualified monitoring biologist. The Biological Construction Monitoring Exhibit shall include the construction site plan, written and graphic depiction of the project's biological monitoring program, and a schedule for construction activities. Where the potential for impacts on biological resources is limited (e.g., construction within a footprint that consists entirely of previously developed or disturbed lands), the Biological Construction Monitoring Exhibit may be limited to a pre- and post-maintenance verification inspection by a qualified biologist. For highly sensitive resource areas with documented sensitive biological

and aquatic resources present, full-time biological monitors may be required, as determined by a qualified biologist. The Biological Construction Monitoring Exhibit shall be approved by the County of Monterey prior to the start of construction.

b. **Resource Marking/Protection.** Prior to the start of construction activities within the future site-specific project area, the qualified monitoring biologist shall supervise the placement of orange construction fencing or similar visible marker, staking, or flagging along the limits of the construction area adjacent to sensitive biological habitats, as shown on the Biological Construction Monitoring Exhibit to ensure crews remain within the approved construction limits. These demarcations shall not be required for areas with existing barriers, such as chain-link fencing, along the limits or facilities that are within or adjacent to developed and non-sensitive habitat areas. This task shall include flagging plant specimens and delineating buffers to protect sensitive biological resources (e.g., habitats, sensitive plant and wildlife species, including nesting birds) prior to construction.

c. **Cover Trenches.** The qualified monitoring biologist shall oversee the construction site so that cover and escape routes for wildlife from excavated areas shall be provided daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and if plastic sheeting is used, the edges must be covered with soils such that small wildlife cannot access the excavated hole. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and before sealing the exposed area) by the qualified monitoring biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route. The qualified monitoring biologist shall verify that the contractor has covered all steep-walled trenches or excavations prior to the end of construction daily. If wildlife species are encountered within any trenches or excavated areas, the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape (e.g., a ramp or sloped surface at no greater than a 30-degree angle) and allowed to disperse. In addition, the qualified monitoring biologist shall provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and equipment and to use best judgment to avoid killing or injuring wildlife (refer to below section [e] of this MM-BIO-OBJ-3[f]).

d. **Structure and Tree Clearance.** Prior to the issuance of any permit to allow for the removal or demolition of trees and existing structures within the survey area (particularly any ornamental trees and existing buildings in the developed land

areas), the qualified monitoring biologist shall conduct clearance surveys to flush out any wildlife species nesting, roosting, or otherwise occupying the trees or structures. If wildlife species are encountered within any of the trees or structures (outside the general bird nesting season), the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape and allow the species to disperse. If tree-roosting bats are suspected, slow removal by gently pushing the tree over with heavy equipment is required. All tree removal in inland areas shall be in accordance with the Monterey County Code, Chapter 16.60, Preservation of Oak and Other Protected Trees. All tree removal in coastal areas shall be in accordance with Section 20.146.060 of the Monterey County Coastal Implementation Plan, Regulations for Development in the Carmel Area Land Use Plan, and Section 20.144.050 of the Monterey County Coastal Implementation Plan, Regulations for Development in the North County Land Use Plan Area, including preparation of a Forest Management Plan, as applicable.

e. **Nighttime Lighting.** Prior to the start of any construction activity where the site plan for the construction area indicates that significant impacts on biological resources may occur, the qualified monitoring biologist shall confirm the planned construction activities are limited to between dawn and dusk to avoid the use of nighttime construction lighting and the resulting illumination of on-site and adjacent habitat areas. In the event that temporary nighttime construction lighting is necessary, the qualified monitoring biologist shall oversee the construction site so that all lighting is of the lowest illumination necessary for human safety, directed away from sensitive vegetation communities and habitat areas, and shielded to minimize light spillover outside of the designated work area.

f. **Pre-Construction Meeting/Education.** Prior to the start of any construction activity where the site plan for the construction area indicates that significant impacts on biological resources may occur, as determined by a qualified biologist, a pre-construction meeting shall be held on site with the following in attendance: County of Monterey project manager, the construction contractor (if applicable), and the qualified monitoring biologist. At this meeting, the qualified monitoring biologist shall identify and discuss the construction protocols that apply to the proposed activities and the sensitive nature of the adjacent habitat with appropriate project personnel.
   - At the pre-construction meeting, the qualified monitoring biologist shall submit to the County of Monterey representative and construction contractor a copy of the Biological Construction Monitoring Exhibit that identifies areas to be protected, fenced, and monitored. This data shall include all buffer limits, if applicable.

- Prior to the start of construction activities, the qualified monitoring biologist shall meet with the construction contractor and crew and conduct an on-site educational session regarding the need to avoid impacts outside the approved construction footprint and to protect sensitive plants and wildlife that may occur at the specific facility. This may include but not be limited to explanations of the bird and wetland buffers, the flag system for removal of invasive species or retention of sensitive plants, and clarification of acceptable access routes/methods and staging areas.

g. **Regulatory Compliance Monitoring.** The qualified monitoring biologist shall conduct periodic compliance checks for construction activities to document compliance with applicable state and local regulations controlling erosion, stormwater runoff, fugitive dust, use of weed- and invasive-free erosion control materials, and excessive noise, including but not limited to, the National Pollutant Discharge Elimination System Construction General Permit provisions, an approved Stormwater Pollution Prevention Plan, erosion and dust control best management practices, and Monterey County Ordinances for stormwater, erosion control, and noise. The qualified monitoring biologist shall have authority to notify the construction contractor and require corrective actions as needed to maintain compliance with the above regulations.

h. **Biological Monitoring and Reporting.** The qualified monitoring biologist with stop work authority shall inspect/monitor the project construction area in accordance with the approved Biological Construction Monitoring Exhibit. This may be limited to pre- and post-maintenance inspections, weekly visits, or full-time monitoring, as determined by the qualified monitoring biologist and County of Monterey. If, during construction, the qualified monitoring biologist identifies sensitive habitat and/or a sensitive species that are neither avoided by design nor identified on the Biological Construction Monitoring Exhibit, or that were not identified in the initial survey and reporting required under MM-BIO-OBJ-1, the qualified biologist shall immediately stop work and notify the County. Work will not commence in the affected area until the County and, if required, a consulting wildlife agency, agree that the project would no longer have the potential to impact a sensitive biological resource.

i. **Documentation.** The qualified monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the County of Monterey project manager each month. However, if weekly reports are submitted as part of a separate agency permit requirement, these reports may be forwarded to the County of Monterey in place of Consultant Site Visit Record submittals.

j. **Final Monitoring Report.** If no deviations from the construction site plan occur during maintenance, no additional documentation is required. However, if

deviations from the site plan do occur, such as unanticipated impacts on sensitive vegetation communities or unanticipated discharge of pollutants, a Final Monitoring Report shall be prepared within 3 months following the completion of mitigation monitoring detailing maintenance and monitoring that occurred, and any remedial or compensatory measures taken.

**MM-BIO-CONS-4: Qualified Monitoring Biologist.** Prior to the start of construction activities for discretionary developments streamlining under the Consistency Process, as required by mitigation measures recommended by the biological survey report pursuant to County of Monterey Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and Mitigation Measure (MM-) BIO-CONS-2, a qualified monitoring biologist shall be retained to implement required monitoring.

Refer to MM-BIO-OBJ-3, above, for all standards and requirements for MM-BIO-CONS-4.

**MM-BIO-CONS-5: Sensitive Vegetation Communities Impacts Mitigation.** Applicants for projects that qualify for streamlining under the Consistency Process that result in direct impacts on sensitive vegetation communities shall be required to provide mitigation to comply with California Department of Fish and Wildlife (CDFW) authorizations at a minimum 1:1 ratio, or as defined in any state or federal permit(s) issued for the project.

Potential direct impacts on sensitive vegetation communities resulting from discretionary project implementation shall be mitigated prior to subsequent project-level approval and prior to any vegetation clearing or ground-disturbing activities within the site-specific areas through one of the following two options:

1. Compensatory mitigation shall be satisfied through the acquisition of mitigation bank credits via a resource agency-approved mitigation site within the site's specific watershed or by acquisition of other off-site mitigation credits to be identified and selected in coordination with CDFW. Prior to implementation of project construction impacts (e.g., vegetation clearing or ground-disturbing activities) that would require compensatory mitigation, documentation demonstrating the availability of mitigation credits (i.e., credit ledger) at the approved mitigation site must be submitted to the County of Monterey for confirmation.
2. If credits are not available at a resource agency-approved mitigation site within the site's specific watershed or through other off-site mitigation credits, implementation of habitat creation, restoration, enhancement, or preservation shall occur through a Habitat Mitigation and Monitoring Plan developed by a qualified biologist. Under this option, a Habitat Mitigation and Monitoring Plan shall be

provided and prepared to achieve no net loss of the resource, be timed in relation to project impacts, and comply with federal and state mitigation requirements.

3. When proposed mitigation involves habitat enhancement, restoration, or creation, the Habitat Mitigation and Monitoring Plan shall include all of the following information:

    - Conceptual planting plan including planting zones, grading, and irrigation.
    - Seed mix/planting palette.
    - Planting specifications.
    - Monitoring program prepared by a qualified biologist including success criteria that ensure no net loss of sensitive vegetation communities. Final success criteria shall be determined based on quality, quantity, and type of habitat impacted and in consultation with CDFW. The monitoring program shall include measures for adaptive management plan detailing remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, supplemental water, replanting, and herbivore deterrents/protections.

    For mitigation that involves habitat acquisition, the Habitat Mitigation and Monitoring Plan shall include all of the following:

    - Location of proposed acquisition.
    - Description of the biological resources to be acquired, including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact.
    - Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

    The identification of mitigation site credits shall be provided to the County of Monterey and shall include the following:

    - Location of approved mitigation site.
    - Description of the mitigation credits to be acquired, including substantial evidence that the acquired habitat mitigates for the specific maintenance impact.
    - Documentation of the credits that are associated with a mitigation bank, which has been approved by the appropriate resource agencies.
    - Documentation in the form of a current mitigation credit ledger.

**MM-BIO-CONS-6: Habitat Restoration for Temporary Impacts.** Applicants for discretionary projects that qualify for streamlining under the Consistency Process that result in temporary impacts shall restore these areas to pre-construction topographic contours and conditions, including the revegetation of native plant communities, where appropriate, following

disturbance and prior to project completion. Habitat restoration and erosion control treatments shall be installed within these short-term impact areas. Habitat revegetation shall feature native species that are typical of the area, and associated erosion control best management practices shall include silt fence and microplastic- and weed-free straw fiber rolls, where appropriate. The revegetation areas shall be monitored and maintained by a qualified biologist or restoration specialist for 25 months to ensure adequate establishment and sustainability of the plantings/seedings.

Where a project activity involves potential disturbance of non-native invasive plant species (as identified by the California Invasive Plant Council), these plants shall be entirely removed immediately, where feasible, and the removal shall be monitored by the qualified monitoring biologist to ensure that dispersal of propagules (e.g., seeds and stems) are avoided or minimized. Where removal of plant roots is not feasible (e.g., where erosive flows are predicted), aboveground plant material shall be fully removed and monitored by the qualified monitoring biologist. Where aboveground plant material cannot be removed (e.g., due to limited access), herbicides shall be applied by a licensed pest control advisor, using chemicals permitted as safe within aquatic environments.

## Sensitive Wildlife Species

**MM-BIO-OBJ-7: Focused Bird Species Surveys for Avoidance.** Project construction activities for by-right housing developments streamlining under the Objective Process that may directly (e.g., vegetation removal, clearing and grubbing, building demolition) or indirectly affect (noise, light, or ground vibration) nesting raptors and other protected bird species shall be timed to avoid the nesting season (February 1 through September 15). If Project activities occur within the nesting season, the qualified monitoring biologist shall conduct focused surveys for birds in suitable habitat to determine presence/absence. Surveys shall occur within seven (7) days prior to any construction or grading activities within the future site-specific project areas. Focused sensitive bird surveys shall be conducted during the species' specific nesting seasons to determine presence/absence within the development footprint plus a buffer, if recommended by the qualified monitoring biologist (refer to MM-BIO-OBJ-1 and MM-BIO-OBJ-3). The survey report shall map and describe the location and extent of observed sensitive bird species that would be impacted within the areas of potential effect for each project area. If no nesting birds are documented within the individual activity area, construction shall be allowed to proceed. If nesting birds cannot be completely avoided, a no-disturbance buffer shall be established around the active nest, the size of which will be determined by the qualified monitoring biologist based on species of bird and specific construction activities to take place. The size of the buffer can be reduced by the qualified monitoring biologist in consultation with California Department of Fish

and Wildlife. Any work within the buffer shall be avoided until the nest is inactive, as determined by the qualified monitoring biologist.

**MM-BIO-CONS-8: Focused Bird Species Surveys for Avoidance.** Project construction activities for discretionary developments streamlining under the Consistency Process that may directly (e.g., vegetation removal, clearing and grubbing, building demolition) or indirectly affect (noise, light, or ground vibration) nesting raptors and other protected bird species shall be timed to avoid the nesting season (February 1 through September 15). If Project activities occur within the nesting season, the qualified monitoring biologist shall conduct focused surveys for birds in suitable habitat to determine presence/absence. Surveys shall occur within seven (7) days prior to any construction or grading activities within the future site-specific project areas.

Refer to MM-BIO-OBJ-7 above, for all standards and requirements for MM-BIO-CONS-8.

Refer to PEIR Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### 6.1.4 Significance After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, conservation or restoration of sensitive vegetation communities potentially occupied by sensitive plant and wildlife species, and conducting focused surveys for sensitive bird species prior to construction. Further, under MM-BIO-OBJ-3 and MM-BIO-CONS-4 the biological monitor would be responsible for the following: preparation of an exhibit for monitoring, overseeing resource marking and protection, ensuring cover and escape routes for wildlife are provided, conducting clearance surveys for roosting bats and nesting birds, monitoring for nighttime lighting compliance, providing contractor environmental education, the ability to stop work, and conducting general compliance monitoring and reporting requirements. MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would require implementation of BMPs to reduce construction noise and vibration in compliance with County Code, Chapter 10.60, Noise Control. Impacts would be reduced below a level of significance for the Consistency Process. However, because the County must process certain uses by right, there is a potential that impacts to sensitive plant and wildlife species cannot be mitigated below a level of significance. Therefore, impacts on sensitive plant and wildlife species would be significant and unavoidable.

## 6.2 Threshold 2: Riparian Habitat or Other Sensitive Natural Community

### 6.2.1 Guidelines for Determination of Significance

A significant impact would result if the project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS.

### 6.2.2 Impact Analysis

#### Direct Impacts

A total of six sensitive vegetation communities and two land cover types occur in the project area, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, coastal scrub, agricultural land, and urban/developed land. Construction activities on the project opportunity sites that contain or are within 100 feet of sensitive vegetation communities could result in potential impacts on these sensitive vegetation communities.

As noted in Section 4.3.2, the project, including by-right housing developments and developments streamlining under the Consistency Process on opportunity sites, would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of sensitive vegetation communities, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, and coastal scrub (Opportunity Sites 1, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 31, 32, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 52, 53, and 56), a biological survey would be conducted to determine the presence of sensitive vegetation communities.

If the results of the biological survey (MM-BIO-OBJ-1 and MM-BIO-CONS-2) determine that sensitive vegetation communities are not present in or within 100 feet of the project opportunity sites, direct impacts on sensitive vegetation communities would be less than significant, and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive vegetation communities occur in or within 100 feet of the opportunity sites and avoidance is not feasible, direct impacts on sensitive vegetation communities would be potentially significant without mitigation.

Impacts on opportunity sites comprised only of non-sensitive land cover types, including agricultural land and urban/developed land (Opportunity Sites 2, 3, 5, 6, 17, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 39, 41, 49, 50, 51, 54, 55, and 64), would not be considered significant or require habitat-based mitigation.

In the event sensitive vegetation communities are identified in the project opportunity sites and avoidance is not feasible, development of the project could result in potentially significant direct impacts on sensitive vegetation communities, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, and coastal scrub.

With implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 through MM-BIO-CONS-6, direct impacts on these sensitive vegetation communities would be reduced through monitoring by a qualified biologist, mitigating for acreage impacts through the Objective Process MM-BIO-OBJ-1[2] and Consistency Process MM-BIO-CONS-2, and restoring habitat for temporary impacts.

### Indirect Impacts

Most of the indirect impacts on sensitive plant species described in Section 6.1, Threshold 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts on sensitive vegetation communities. Like the discussion under Indirect Impacts in Section 6.1.2.1, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine that sensitive vegetation communities do not occur in or within 100 feet of the project opportunity sites, indirect impacts on sensitive vegetation communities would be less than significant, and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive vegetation communities are present in or within 100 feet of the project opportunity sites, indirect impacts on sensitive vegetation communities would be considered potentially significant without mitigation.

Indirect impacts on sensitive vegetation communities from hydrologic changes, including erosion, stormwater runoff, and pollution discharges would be reduced through project compliance with NPDES Construction General Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs) and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on sensitive vegetation communities from erosion, polluted runoff, and hydrologic changes would be less than significant, and no mitigation is required.

However, indirect impacts on sensitive vegetation communities from edge effects and increased human activity during construction could result. Therefore, indirect impacts on sensitive vegetation communities during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would

[2] Mitigation is required through this PEIR. The Objective Process mitigation measures in this PEIR would be made a condition in the By-Right Housing Ordinance upon adoption, at which point Objective Process projects would be required to adhere to ordinance without additional future discretionary mitigation.

be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction of the project.

### 6.2.3 Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6.

### 6.2.4 Significance After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, and conservation or restoration of sensitive vegetation communities.

Impacts on sensitive vegetation communities for Consistency Process projects would be less than significant with mitigation incorporated. It is still possible that impacts on riparian habitat or other sensitive natural community could occur through projects subject to the Objective Process. As discussed in section 3.7.3, By-Right Development of this PEIR, the County must process certain uses by right, using objective criteria and no CEQA review, limitations that may result in significant impacts. Therefore, this impact would be significant and unavoidable.

## 6.3 Threshold 3: Jurisdictional Aquatic Resources

### 6.3.1 Guidelines for Determination of Significance

A significant impact would result if the project would have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means of disturbance.

### 6.3.2 Impact Analysis

#### Direct Impacts

Aquatic resources that are identified by their characteristic vegetation communities, including freshwater (Opportunity Sites 11 through 15) and freshwater marsh (Opportunity Sites 24 and 56), occur in the project area and may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW. In addition, Opportunity Site 3 and 42 appear to occur within 100 feet of documented and potentially jurisdictional aquatic features and may be subject to additional environmental review under County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland).

As noted in Section 4.3.2, the project, including by-right housing developments and developments streamlining under the Consistency Process on opportunity sites, would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions

set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain or are within 100 feet of documented sensitive aquatic resources, including major rivers, creeks, and wetlands (including but not limited to Opportunity Sites 3, 11 through 15, 24, 42 and 56), a biological survey would be conducted to determine the presence of jurisdictional aquatic resources.

If the results of the biological survey determine that jurisdictional aquatic resources are not present in or within 100 feet of the project opportunity sites and avoidance is not feasible, direct impacts on jurisdictional aquatic resources would be less than significant and no additional mitigation would be is required.

Alternatively, if the results of the biological survey determine that jurisdictional aquatic resources occur in or within 100 feet of the project opportunity sites, direct impacts on jurisdictional aquatic resources would be potentially significant without mitigation.

For Opportunity Sites 11 through 15 and 56, HEU6 proposes split zoning consisting of HDR/30 or HDR/25 and RC (Resource Conservation) designations to preserve sensitive resources and create a buffer between those resources and high-density residential development. However, where split zoning cannot entirely avoid development within sensitive aquatic vegetation communities, site-specific biological surveys and appropriate mitigation measures would still be required. In the event jurisdictional aquatic resources are identified and cannot be avoided by project development, a formal aquatic resources delineation and resource agency (USACE, CDFW, and RWQCB) approval of the mitigation strategy to compensate for impacts on jurisdictional aquatic resources through the permitting process would be required. Implementation of MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 would reduce direct impacts on jurisdictional aquatic resources through conducting an aquatic resource delineation and obtaining resource agency permits. With implementation of MM-BIO-OBJ-9 and MM-BIO-OBJ-11, qualifying projects may streamline under the Objective Process. If aquatic resources on the site do provide suitable habitat for sensitive plant or wildlife species, the protection measures in MM-BIO-OBJ-1 would be required.

### Indirect Impacts

Most of the indirect impacts on sensitive plant species and sensitive vegetation communities described in Sections 6.1 and 6.2 also result in potentially significant indirect impacts on jurisdictional aquatic resources. Like the discussion in these sections, if the results of the biological survey required by the County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), and MM-BIO-OBJ-1 and MM-BIO-CONS-2determine that jurisdictional aquatic resources do not occur in or within 100 feet of the project opportunity sites, indirect impacts on jurisdictional aquatic resources would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that jurisdictional aquatic resources are present in or within 100 feet of the project opportunity sites, indirect impacts on jurisdictional aquatic resources could occur.

As previously discussed under Indirect Impacts in Section 6.1.2.1, indirect impacts on jurisdictional aquatic resources from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs) and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14 and 16.16, Regulation for Flood Plains. Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts on jurisdictional aquatic resources from erosion, polluted runoff, and hydrologic changes would be less than significant and no additional mitigation would be required.

However, indirect impacts on jurisdictional aquatic resources from edge effects and increased human activity during construction could result. Therefore, indirect impacts on jurisdictional aquatic resources during project construction activities would be considered potentially significant without mitigation. Implementation of MM-BIO-OBJ-3 and MM-BIO-CONS-4 would be required to reduce potential impacts to a less than significant level through monitoring by a qualified biologist prior to and during construction of the project.

### 6.3.3 Mitigation Measures

Refer to MM-BIO-OBJ-1 and MM-BIO-CONS-2.

**MM-BIO-OBJ-9: Aquatic Resources Delineation.** If potentially jurisdictional aquatic resources are identified within opportunity sites for by-right housing developments streamlining under the Objective Process during implementation of Mitigation Measure (MM-) BIO-OBJ-1 as pursuant to Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), or during any other surveys or monitoring, a qualified biologist shall conduct a formal aquatic resources delineation following the methods outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and applicable Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual to map the extent of wetlands and non-wetland waters, determine jurisdiction, and assess potential impacts. The results of the delineation shall be presented in an aquatic resources delineation report. The aquatic resources delineation report shall be used in consultation with the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for necessary authorization or permit, as described in MM-BIO-OBJ-11.

**MM-BIO-CONS-10: Aquatic Resources Delineation.** If potentially jurisdictional aquatic resources are identified within opportunity sites for developments streamlining under the Consistency Process during implementation of MM-BIO-CONS-2 as pursuant to Monterey County Code, Sections 20.66.020 (coastal) and 21.66.020 (inland), or during any other surveys or monitoring, a qualified biologist shall conduct a formal aquatic resources delineation.

Refer to MM-BIO-OBJ-9, above, for all standards and requirements for MM-BIO-CONS-10.

**MM-BIO-OBJ-11: Potentially Jurisdictional Aquatic Resources Permitting.** Any by-right housing developments streamlining under the Objective Process that result in temporary and permanent impacts on the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall require authorization by the U.S. Army Corps of Engineers through the Section 404 Permit Program, by the Regional Water Quality Control Board through a 401 State Water Quality Certification, and by the California Department of Fish and Wildlife through a 1602 Streambed Alteration Agreement. Approved temporary and permanent impacts on the potentially federal and state jurisdictional aquatic resources in the project area may require compensatory mitigation through proposed on- or off-site habitat restoration, creation, or enhancement to the satisfaction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife to achieve a no-net loss of federal and state jurisdictional wetland and non-wetland waters. The permit(s) shall be submitted to the County prior to issuance of any permit for construction or grading.

**MM-BIO-CONS-12: Potentially Jurisdictional Aquatic Resources Permitting.** Any developments streamlining under the Consistency Process on opportunity sites that result in temporary and permanent impacts on the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall require authorization by the U.S. Army Corps of Engineers through the Section 404 Permit Program, by the Regional Water Quality Control Board through a 401 State Water Quality Certification, and by the California Department of Fish and Wildlife through a 1602 Streambed Alteration Agreement. The permit(s) shall be submitted to the County prior to issuance of any permit for construction or grading.

Refer to MM-BIO-OBJ-11, above, for all standards and requirements for MM-BIO-CONS-12.

### 6.3.4 Significance After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12 would require a pre-construction biological survey, a formal aquatic resource delineation, and approval of resource agency permits. Therefore, impacts on jurisdictional aquatic resources would be less than significant with mitigation incorporated.

## 6.4 Threshold 4: Wildlife Corridors and Habitat Linkages

### 6.4.1 Guidelines for Determination of Significance

A significant impact would occur if the project would interfere substantially with the movement of any native resident or migratory fish or wildlife species, with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

### 6.4.2 Impact Analysis

#### Direct Impacts

As discussed in Section 3.4, Wildlife Corridors and Habitat Linkages, the project area is likely to be used as a wildlife movement corridor because it provides suitable nesting, foraging, nursery, and dispersal areas for both sensitive and common wildlife species due to the presence of native vegetation communities and its connection and proximity to the Pacific Coast and open waters to the west as well as mountain ranges to the east. The northern portion of the project area is adjacent to the Pacific Coast, and there are numerous freshwater aquatic resources in and surrounding the project area, all of which function as large-scale wildlife movement corridors for resident and migratory birds, large mammals, and aquatic species both locally and regionally. The residential and commercial development throughout much of the project area has the potential to limit wildlife movement through the project area. The woodland and forest communities in the project area in particular, are high-quality, contiguous sections of these habitats that support movement and linkages to other habitats along the Pacific Coast and through the mountains to the east for both local and migratory species.

The project opportunity sites are proposed primarily in areas in and adjacent to existing development and would include temporary impacts that occur during construction activities on the sites. Although the project is not expected to have a significant impact on wildlife corridors and habitat linkages over the long-term, project activities may temporarily disrupt wildlife movement through the project area during construction.

As noted in Section 4.3.2 and discussed in Section 6.1.2.2, the project would implement a biological survey requirement (MM-BIO-OBJ-1 and MM-BIO-CONS-2) in compliance with the provisions set forth in Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code. Thus, prior to project construction on opportunity sites that contain sensitive vegetation

communities or those that could support wildlife corridors and habitat connectivity (such as agricultural land), including Opportunity Sites 1 through 4, 8 through 16, 18 through 22, 24, 25, 26, 31, 32, 37, 38, 40, 42 through 48, 50, 52, 53, and 56, a biological survey would be conducted to determine if the site is used as a wildlife corridor or linkage to other sensitive habitats.

If the results of the biological survey determine that the project opportunity sites do not function as wildlife corridors or habitat linkages, direct impacts would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that wildlife corridors and habitat linkages are present in the project opportunity sites and avoidance is not feasible, direct impacts would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required. Consistency Process mitigation would reduce impacts to a less than significant level. It is still possible that impacts to wildlife corridors, habitat linkages, and nursery sites could occur through the Objective Process. The County must process certain uses by right using objective criteria and without CEQA or discretion, which may result in significant impacts. Therefore, the impact would be significant and unavoidable.

### Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 6.1.2.2 for indirect impacts on sensitive wildlife species. Like the discussion under Sensitive Wildlife Species, Direct Impacts, if the results of the biological survey required by Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code and MM-BIO-OBJ-1 and MM-BIO-CONS-2 determine the project opportunity sites do not contain or function as wildlife corridors and habitat linkages, indirect impacts on wildlife corridors and habitat linkages would be less than significant and no additional mitigation would be required.

Alternatively, if the results of the biological survey determine that wildlife corridors and habitat linkages occur in or are provided by the project opportunity sites, indirect impacts on sensitive wildlife species could occur.

As previously discussed in Section 6.1.2.2, indirect impacts to wildlife corridors and habitat linkages from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions and County Code, Chapters 16.08, Grading; 16.12, Erosion Control; 16.14, Stormwater Control; and 16.16, Regulation for Flood Plains. Similarly, the project would conform with the County Code Chapter 10.60 Noise Control and implement BMPs for the use of noise- and vibration-emitting equipment during construction. Further, compliance with the County Code, Chapter

10.60, Noise Control, would restrict the hours of construction activity and include a noise level limit to minimize disturbance from construction noise. Potential indirect impacts from new sources of lighting during construction and operation would be reduced through project compliance with the temporary construction lighting and permanent exterior lighting requirements in the County Code, Section 21.63.020, Design Guidelines for Exterior Lighting.

However, indirect impacts on wildlife corridors and habitat linkages from lighting, excessive noise and vibration, and increased human activity could result. Therefore, indirect impacts on wildlife corridors and habitat linkages would be considered potentially significant without mitigation. Therefore, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would be required. Consistency Process mitigation would reduce impacts to a less than significant level. It is still possible that indirect impacts to wildlife corridors, habitat linkages, and nursery sites could occur through the Objective Process. The County must process certain uses by right using objective criteria and without CEQA or discretion, which may result in significant impacts. Therefore, the impact would be significant and unavoidable.

### 6.4.3 Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8.

### 6.4.4 Significance After Mitigation

MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 would require a pre-construction biological survey, monitoring by a qualified biologist prior to and during construction, conservation or restoration of sensitive vegetation communities potentially occupied by sensitive plant and wildlife species, and conducting focused surveys for sensitive bird species prior to construction. Additionally, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would require implementation of BMPs to reduce construction noise and vibration in compliance with the Monterey County Noise Ordinance. However, because the County must process certain uses by right without discretionary permits or CEQA, impacts on wildlife corridors, habitat linkages, and nursery sites would be significant and unavoidable.

## 6.5 Threshold 5: Local Policies and Ordinances

### 6.5.1 Guidelines for Determination of Significance

A significant impact would result if the project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

### 6.5.2 Impact Analysis

The project would comply with local policies and ordinances protecting biological resources in the 2010 General Plan Land Use Element and Conservation and Open Space Element, Area Plans, Master Plans, Community Plans, the Monterey County Local Coastal Program LUP, and the County Code (County of Monterey 2010b). Section 4.3, Local, summarizes the goals and policies from these planning documents that are applicable to biological resources and implementation of the project. Further, as summarized in Section 4.3.2 and discussed in Sections 6.1 through 6.4, the project would comply with Sections 20.66.020 (coastal) and 21.66.020 (inland) of the County Code that requires protection of environmentally sensitive habitats in both coastal and inland areas, including the implementation of a biological survey prior to project development (MM-BIO-OBJ-1 and MM-BIO-CONS-2).

As discussed in Section 6.3, Threshold 3: Jurisdictional Aquatic Resources, the project would avoid, or if avoidance is not feasible, fully mitigate potential impacts on jurisdictional aquatic resources, thereby complying with the 2010 General Plan Conservation and Open Space Element Goal OS-4 and Policies OS-4.1 through OS-4.3, as well as policies from the Area and Master Plans that protect wetlands, like the Greater Monterey Peninsula Area Plan Policies GMP-3.6 and GMP-3.7, which require setbacks and protections for wetlands in the planning area. The project would also ensure that development be outside of the required setbacks of 200 feet from the top of bank of a river and 50 feet from the top of bank of a watercourse, unless certain conditions are met, as outlined in County Code, Section 16.16.050(K), Provisions for flood hazard reduction.

Sections 6.1 through 6.4 address the project's potential impacts on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages; which indicate that impacts would be potentially significant before incorporation of mitigation. However, implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, (from PEIR Section 4.13) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would mitigate impacts to the extent feasible on sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages, as discussed in those sections. Objective Process projects that would require a subdivision through either a tentative map, tentative parcel map, or parcel map would still be required to be consistent with the County's General Plan (2010 General Plan), Local Coastal Program (LCP), Monterey County Code (County Code) (Inland and Coastal Zoning), and other applicable County Code regulations.[3]

[3] Pursuant to California Government Code, Section 66474, a legislative body shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the required findings, including that the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans, that the site is not physically suitable for

It is possible that future projects under the Objective Process would not require a subdivision pursuant to the Subdivision Map Act (e.g., tentative map, tentative parcel map, or parcel map). However, the Housing Accountability Act requires that projects with a "use by right" be consistent with the objective General Plan, zoning, design, and subdivision standards for the site in effect at the time the project application was deemed complete.

However, because the Objective Process requires the County to consider projects objectively, requiring neither discretionary permits or CEQA review, the project could conflict with the 2010 General Plan Conservation and Open Space Element Goal OS-5 and Policies OS-5.1 through OS-5.6, OS-5.9, OS-5.11 through OS-5.13, OS-5.16 through OS-5.18, OS-5.24, and OS-5.25 regarding protection of sensitive plant and wildlife species, critical habitat, and sensitive vegetation communities in the project area. The Objective Process requires avoidance, minimization, and mitigation of impacts through both the By-Right Housing Ordinance and compliance with objective requirements to reduce impacts on sensitive biological resources. However, neither full mitigation nor consistency with applicable land use plans may be feasible because the County cannot condition or modify a project for environmental concerns.

Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, (from Section 4.13) MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 would ensure that the project would not conflict with any of the previously mentioned local policies or ordinances protecting biological resources through conducting sensitive plant species focused surveys prior to construction of the project, monitoring by a qualified biologist, conducting sensitive bird and wildlife species focused surveys prior to construction, mitigating for sensitive vegetation community acreage impacts, restoring habitat for temporary impacts, conducting an aquatic resources delineation, obtaining resource agency permits, and implementing noise and vibration BMPs during construction.

### 6.5.3 Mitigation Measures

Refer to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5.

### 6.5.4 Significance After Mitigation

Implementation of MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-BIO-OBJ-9, MM-BIO-

the proposed density of development, and that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

CONS-10, MM-BIO-OBJ-11, MM-BIO-CONS-12, and Section 4.13, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5would mitigate direct and indirect impacts to biological resources to the extent feasible. Because of the County's limited discretion to constrain a "use by right", this impact would be significant and unavoidable.

## 6.6 Threshold 6: Regional Conservation Planning

### 6.6.1 Guidelines for Determination of Significance

A significant impact would result if the project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

### 6.6.2 Impact Analysis

The project area is not within an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, no impacts on local or regional conservation plans would occur from implementation of the project and no mitigation is required.

### 6.6.3 Mitigation Measures

No mitigation is required.

### 6.6.4 Significance After Mitigation

No impact without mitigation incorporated.

## 6.7 Cumulative Impacts

### 6.7.1 Cumulative Threshold 1: Sensitive Plant and Wildlife Species

The cumulative project study area was defined within a local context and include surrounding areas with similar biological resources. Cumulative projects within the vicinity of the project area would have the potential to result in impacts on sensitive plant and wildlife species, including loss of habitat.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations that provide protections for sensitive plant and wildlife species, such as the federal Endangered Species Act, California Endangered Species Act, and the California NCCP Act. In addition, some projects that impact sensitive species require approval from the USFWS and CDFW. If significant impacts occur from particular cumulative projects, then mitigation measures are implemented to reduce impacts to the extent feasible in compliance with CEQA.

As discussed in Section 6.1, development of the project would have the potential to impact sensitive plant and wildlife species. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, MM-BIO-CONS-8, MM-NOI-OBJ-1, MM-NOI-CONS-2, MM-NOI-OBJ-4, and MM-NOI-CONS-5 and obtain applicable approval from the CDFW and/or USFWS to reduce the project's impacts on sensitive plant and wildlife species. However, it is possible that cumulative projects include a "use by right", which would limit a jurisdiction's ability to fully mitigate impacts to below a level of significance. The project would result in a significant and unavoidable impact. Therefore, the project's contribution to impacts on sensitive plant and wildlife species would be cumulatively considerable.

### 6.7.2 Cumulative Threshold 2: Riparian Habitat or Other Sensitive Natural Community

Cumulative projects within the vicinity of the project area would have the potential to result in impacts associated with riparian habitat and other sensitive natural communities through direct and indirect loss or degradation.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program or the California NCCP Act. These programs provide protections for riparian and other sensitive habitats. In addition, many projects that affect riparian or other protected habitat types require approval from the USFWS and CDFW. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible. However, it is possible that cumulative projects include a "use by right", which would limit a jurisdiction's ability to fully mitigate impacts to below a level of significance.

As discussed in Section 6.2, Threshold 2: Riparian Habitat or Other Sensitive Natural Community, development of the project would have the potential to impact sensitive vegetation communities. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, and MM-BIO-CONS-4 through MM-BIO-CONS-6 to mitigate the project's impacts on riparian habitat or other sensitive communities to the extent feasible. Nevertheless, the project would still result in a significant and unavoidable cumulative impact based on its considerable cumulative contribution to impacts on riparian habitat and other sensitive natural communities.

### 6.7.3 Cumulative Threshold 3: Jurisdictional Aquatic Resources

Cumulative projects within the vicinity of the project area would have the potential to result in a cumulative impact associated with federally or state protected aquatic resources.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program, Sections 401 and 404 of the CWA, and the Porter-Cologne Act.

Existing regulations would ensure that a significant cumulative impact associated with federally or state protected aquatic resources would not occur. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts as required to meet the regulatory agency's no-net-loss standard. As discussed in Section 6.3, the project would avoid impacts on jurisdictional aquatic resources to the greatest extent feasible, providing compensatory mitigation at an approved ratio for unavoidable impacts (MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-9, MM-BIO-CONS-10, MM-BIO-OBJ-11, and MM-BIO-CONS-12), and would not contribute to cumulative impacts on jurisdictional aquatic resources as a result. As with the project, other project in UMC and surrounding cities are required to comply with existing regulatory requirements and obtain applicable permits from the USACE, RWQCB, and CDFW. Therefore, the project's contribution would not be cumulatively considerable.

### 6.7.4 Cumulative Threshold 4: Wildlife Corridors and Habitat Linkages

Cumulative projects in the vicinity of the project area would have the potential to result in a cumulative impact associated with wildlife movement corridors and habitat linkages.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable federal and state regulations such as the California NCCP Act, which supports the continued provision of wildlife movement corridors. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 6.4, Threshold 4: Wildlife Corridors and Habitat Linkages, development of the project would have the potential to impact wildlife corridors or habitat linkages. Cumulative projects would be required to implement project-specific mitigation measures similar to MM-BIO-OBJ-1, MM-BIO-CONS-2, MM-BIO-OBJ-3, MM-BIO-CONS-4 through MM-BIO-CONS-6, MM-BIO-OBJ-7, and MM-BIO-CONS-8 to mitigate the project's impacts on wildlife corridors or habitat linkages to the extent feasible. However, the project would nevertheless result in a significant and unavoidable cumulative impact.

### 6.7.5 Cumulative Threshold 5: Local Policies or Ordinances

Cumulative projects in the vicinity of the project area would have the potential to result in a cumulative impact associated with conflicts with local policies or ordinances.

The remaining areas in the UMC, as well as adjacent and nearby jurisdictions, including Santa Cruz County to the north, the Counties of San Benito, Fresno, and Kings to the east, and San Luis Obispo County to the south, would be required to comply with applicable local policies or ordinances. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 6.5, Threshold 5: Local Policies and Ordinances, because the County must allow a "use by right" without discretionary permits or CEQA, the project may not comply with local policies and ordinances protecting biological resources in the 2010 General Plan Land Use Element and Conservation and Open Space Element, Area Plans, Master Plans, Community Plans, the Monterey County Local Coastal Program LUP, and the County Code. A significant cumulative impact associated with a conflict with a local policy or ordinance would occur. Therefore, the project, in combination with other cumulative projects, would result in a significant cumulative impact. The project's contribution would be cumulatively considerable.

### 6.7.6 Cumulative Threshold 6: Regional Conservation Planning

As discussed in Section 6.6, Threshold 6: Regional Conservation Planning, the project area is not in an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, the project, in combination with other cumulative projects, would not result in a significant cumulative impact from conflicts with regional conservation plans. The project's contribution would not be cumulatively considerable.

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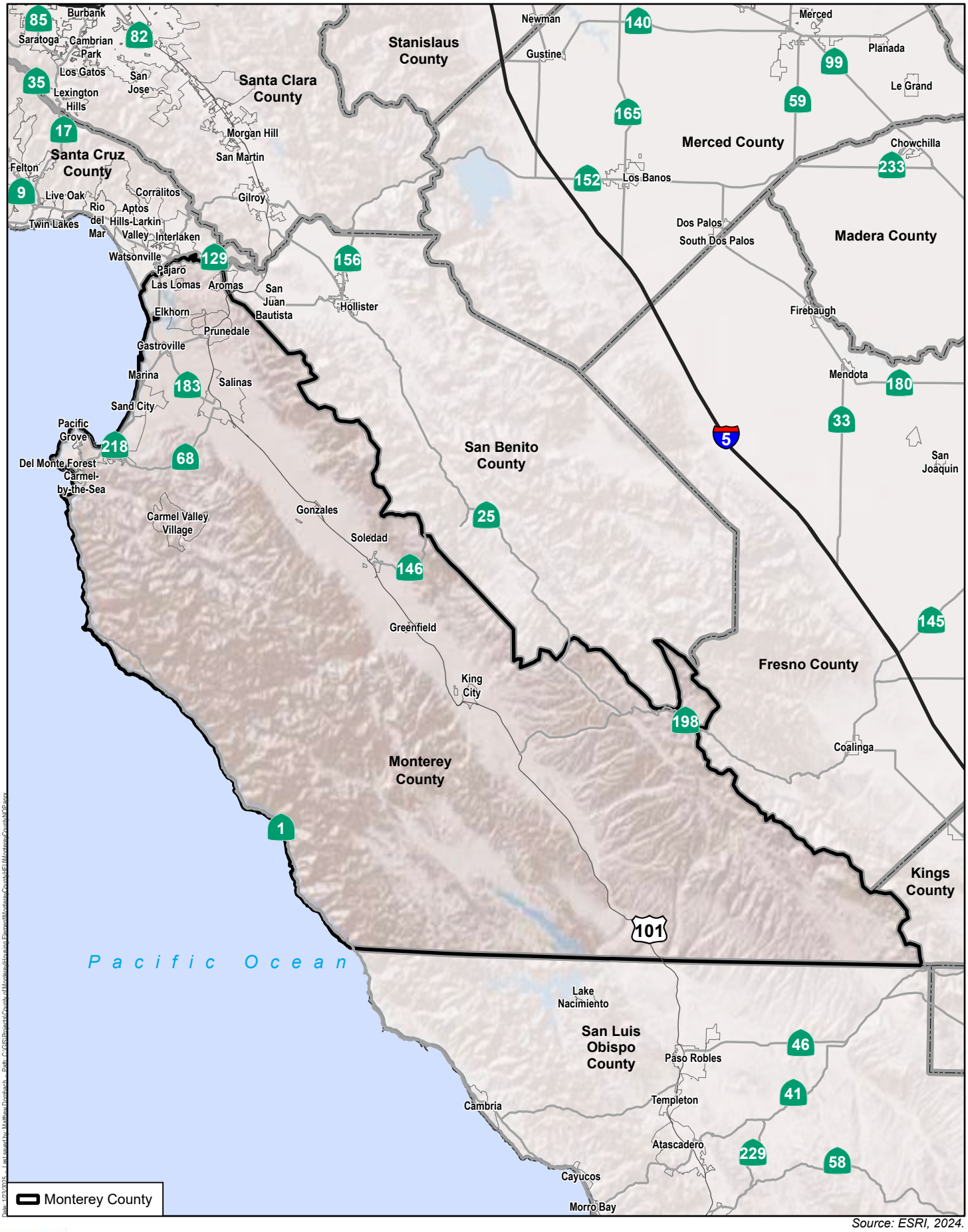
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# Appendix A. Figures

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*Source: ESRI, 2024.*

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**Figure 1**

Regional Location

County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update



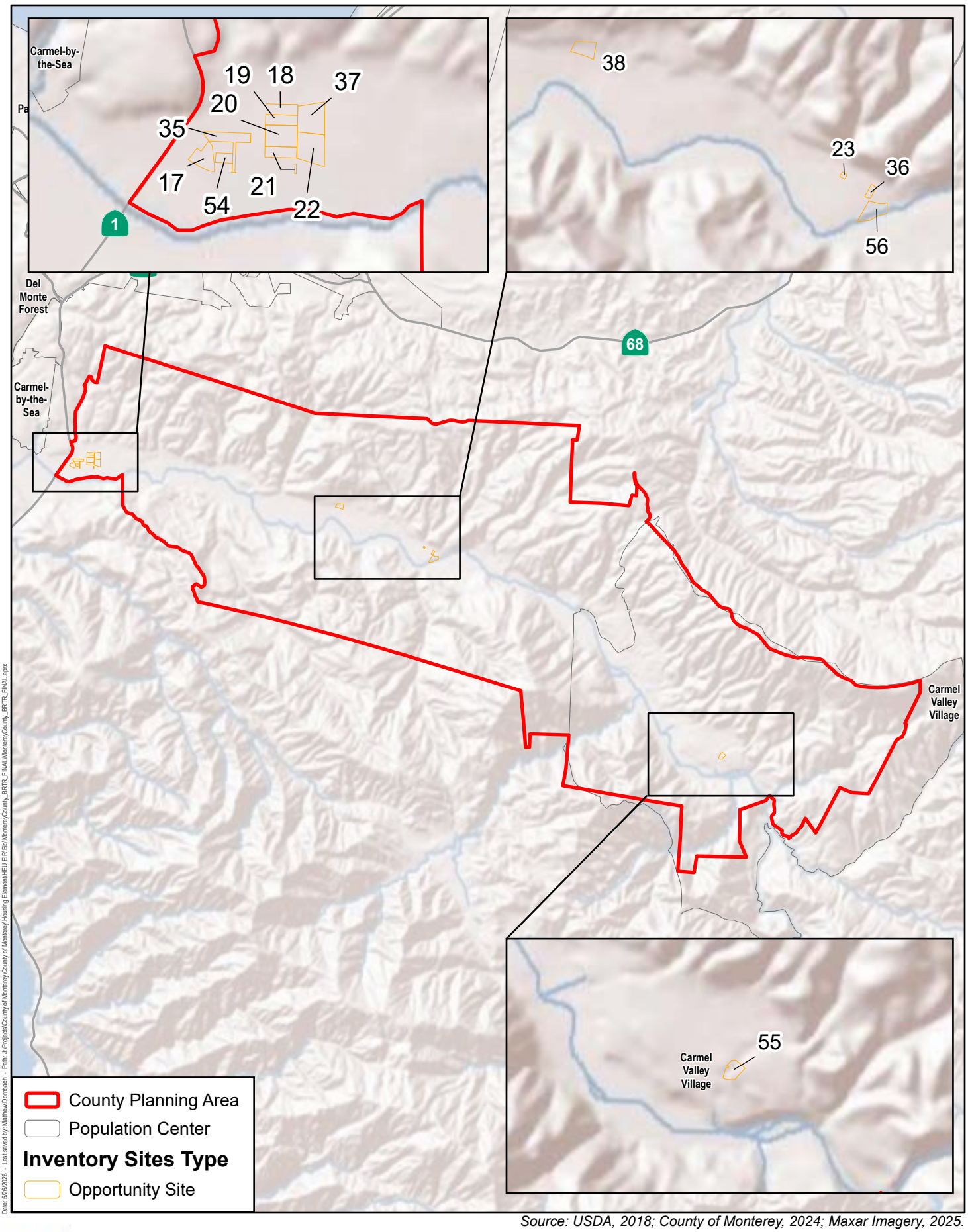

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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**Figure 2a**

Project Location - Opportunity Sites in the Carmel Area Land Use Plan

County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031)




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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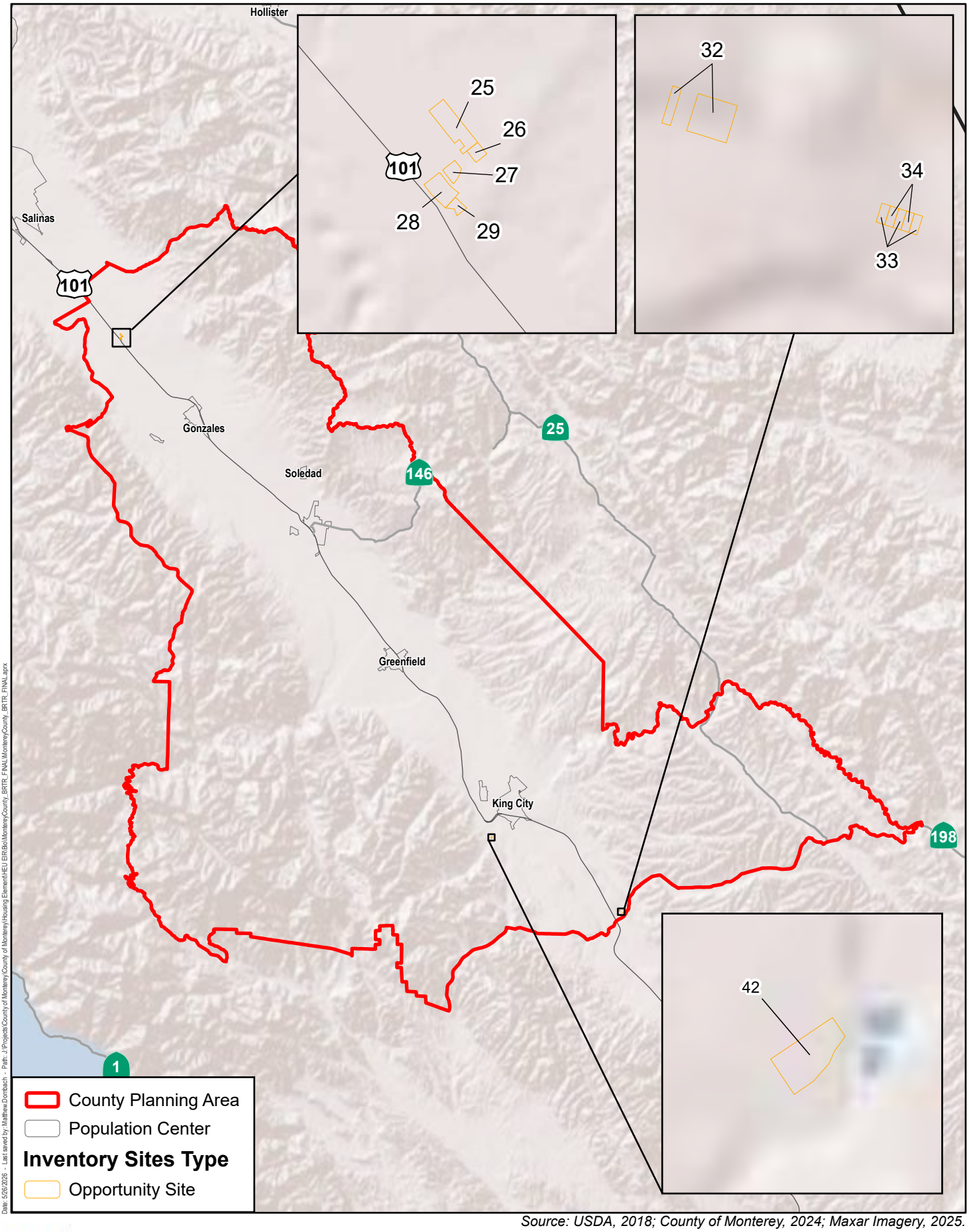
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**Figure 2b**

Project Location - Opportunity Sites in the Carmel Valley Master Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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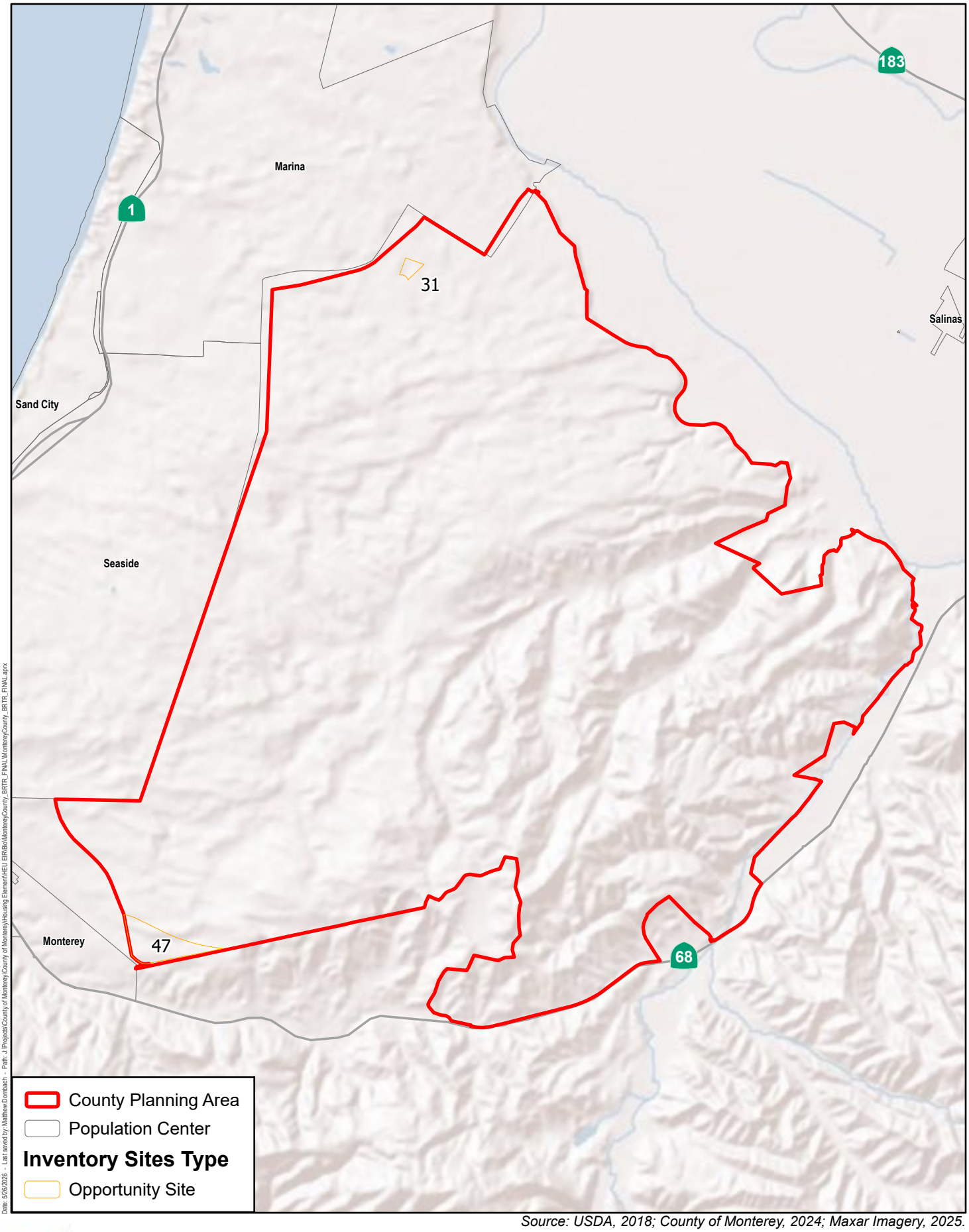
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**Figure 2c**

Project Location - Opportunity Sites in the Central Salinas Valley Area Plan

County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031)




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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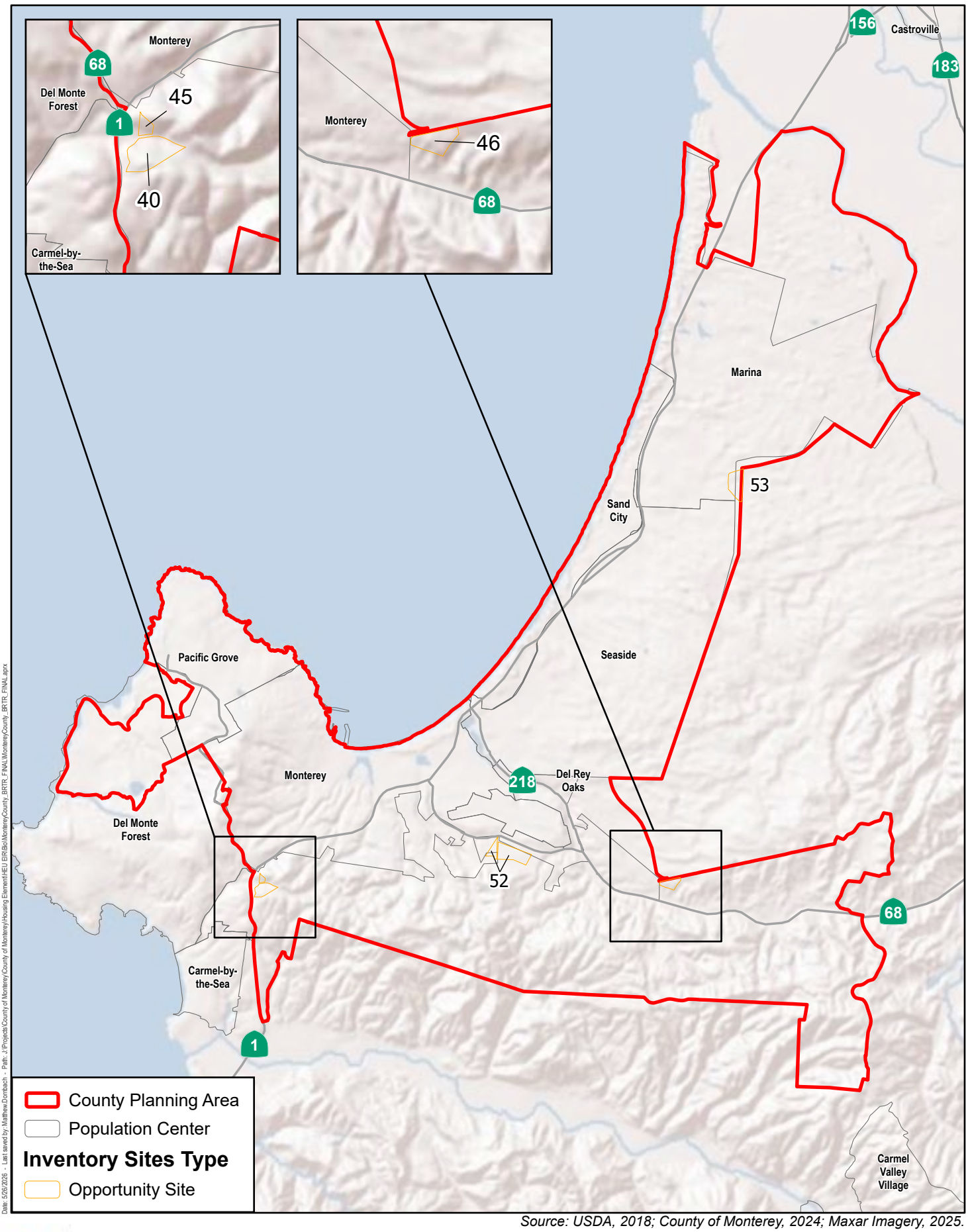
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**Figure 2d**

Project Location - Opportunity Sites in the Fort Ord Master Plan



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*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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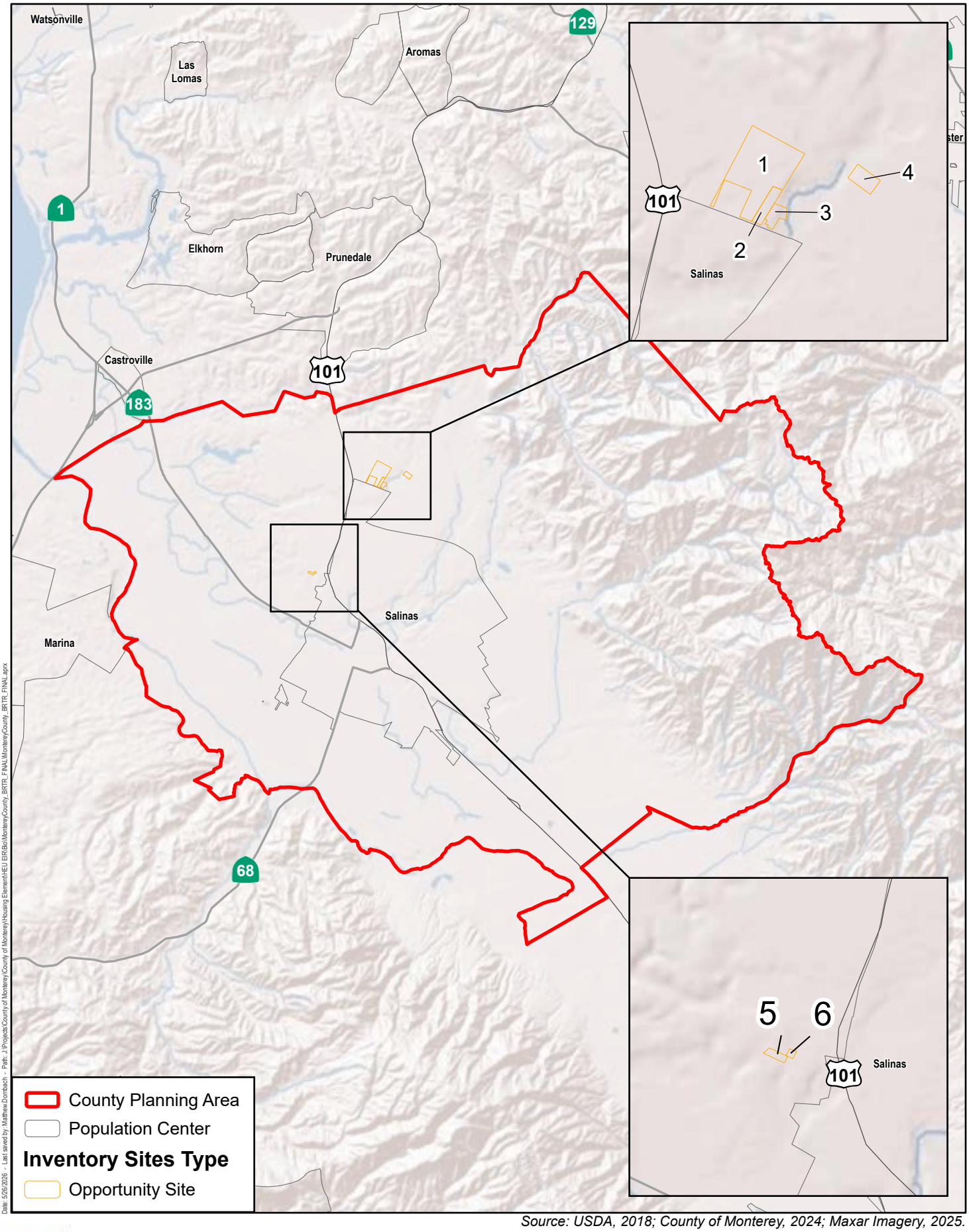
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**Figure 2e**

Project Location - Opportunity Sites in the Greater Monterey Peninsula Area Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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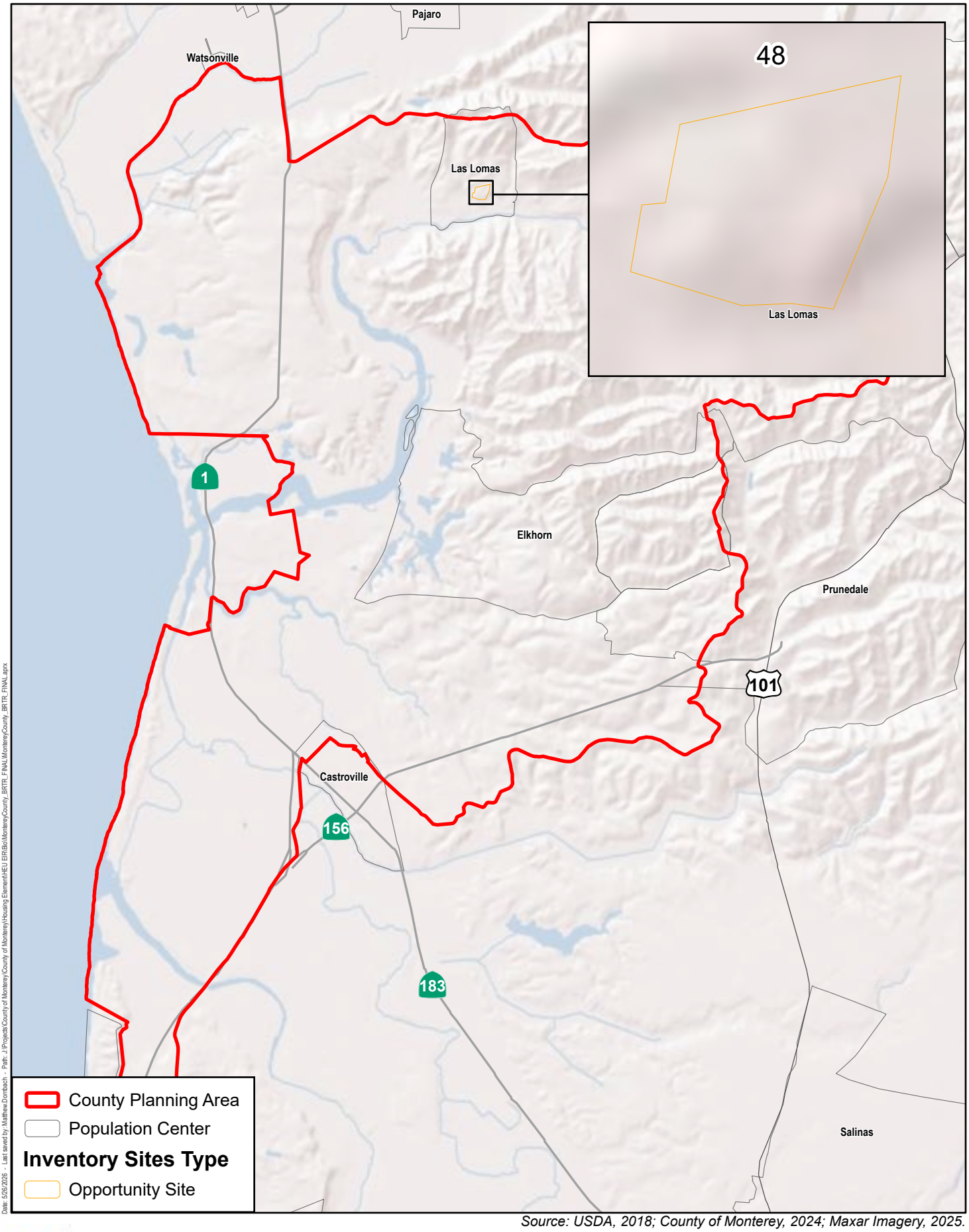
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**Figure 2f**

Project Location - Opportunity Sites in the Greater Salinas Area Plan

County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031)




Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.

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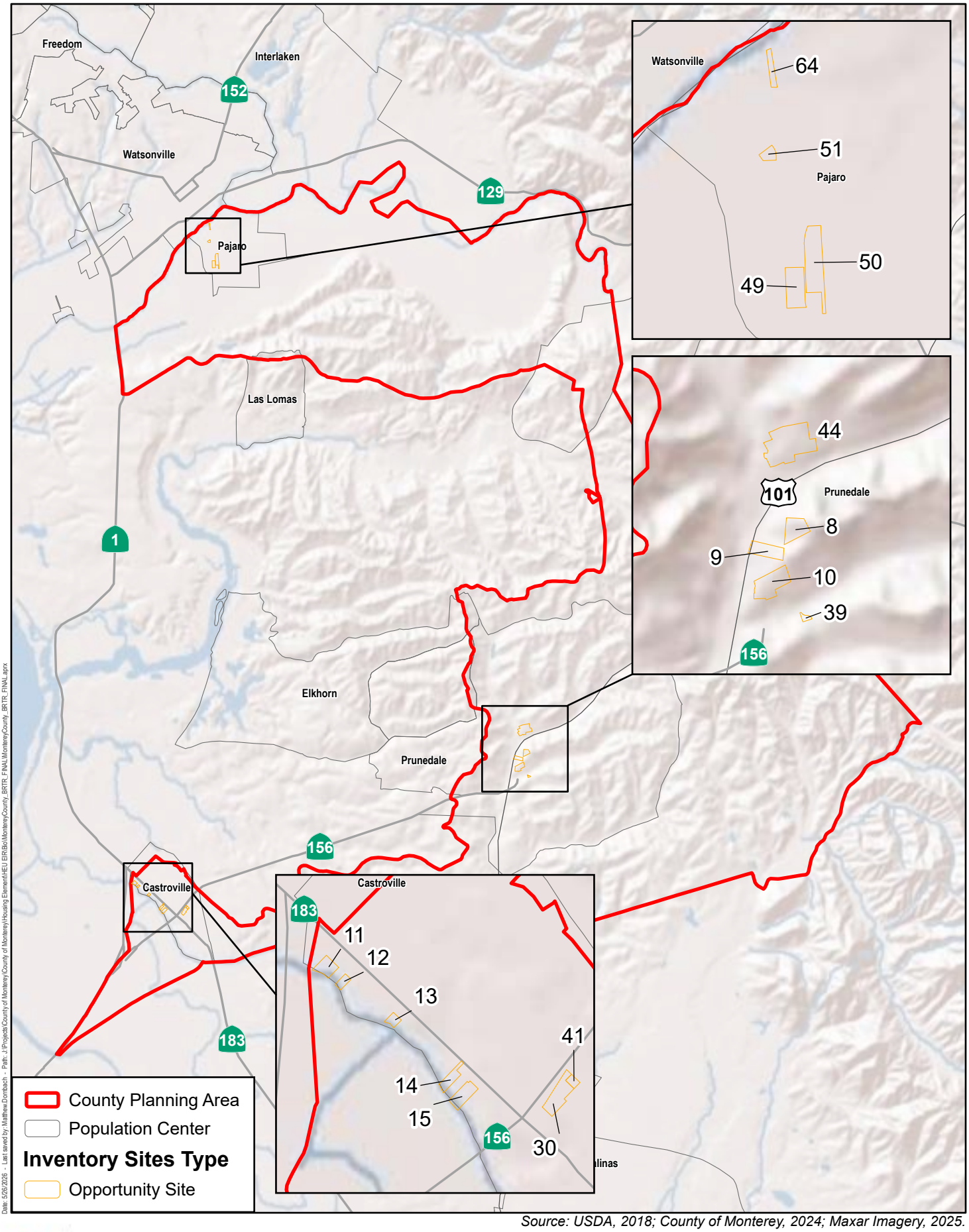
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**Figure 2g**

Project Location - Opportunity Sites in the North County Land Use Plan (Coastal)



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*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

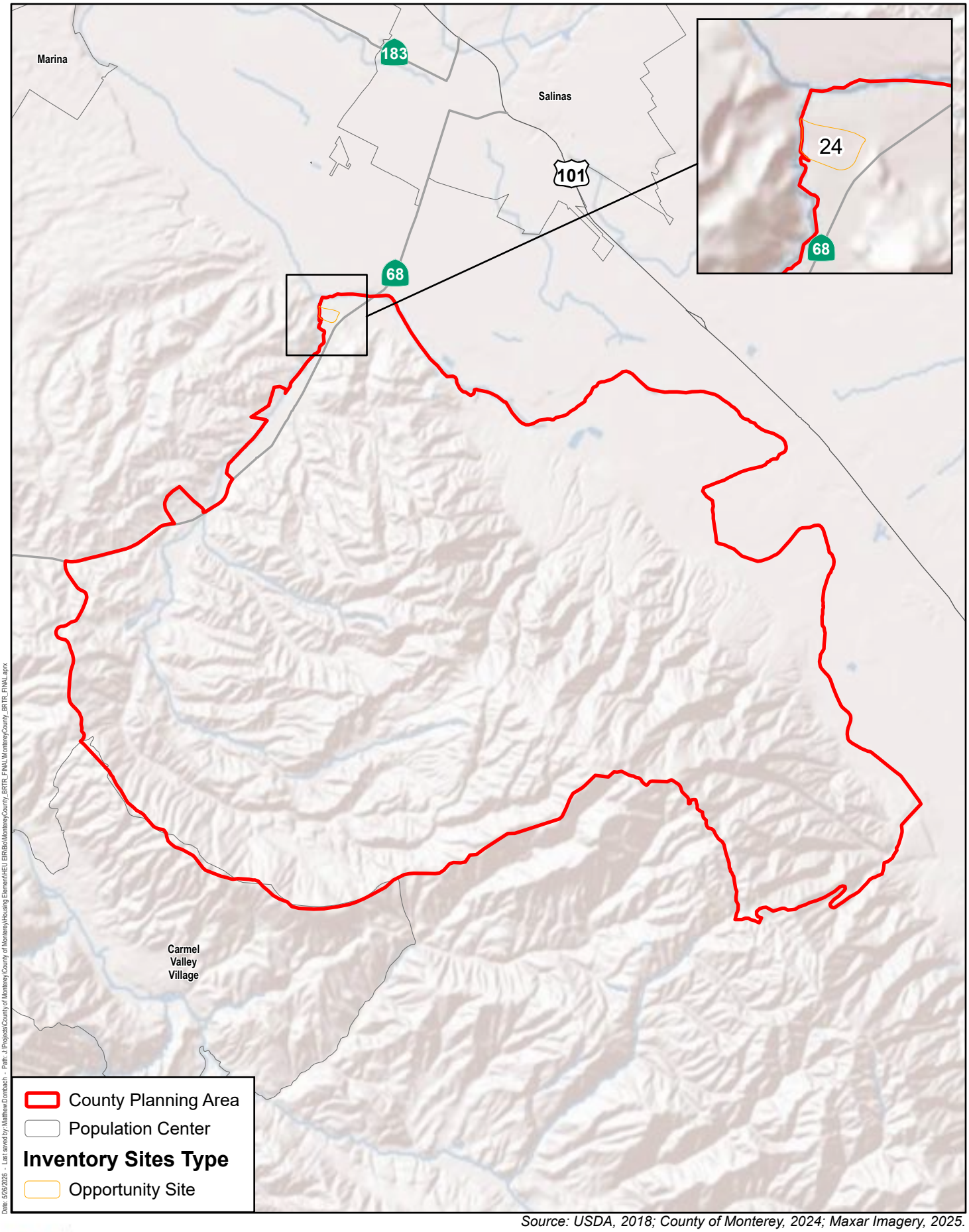
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**Figure 2h**

Project Location - Opportunity Sites in the North County Area Plan (Inland)

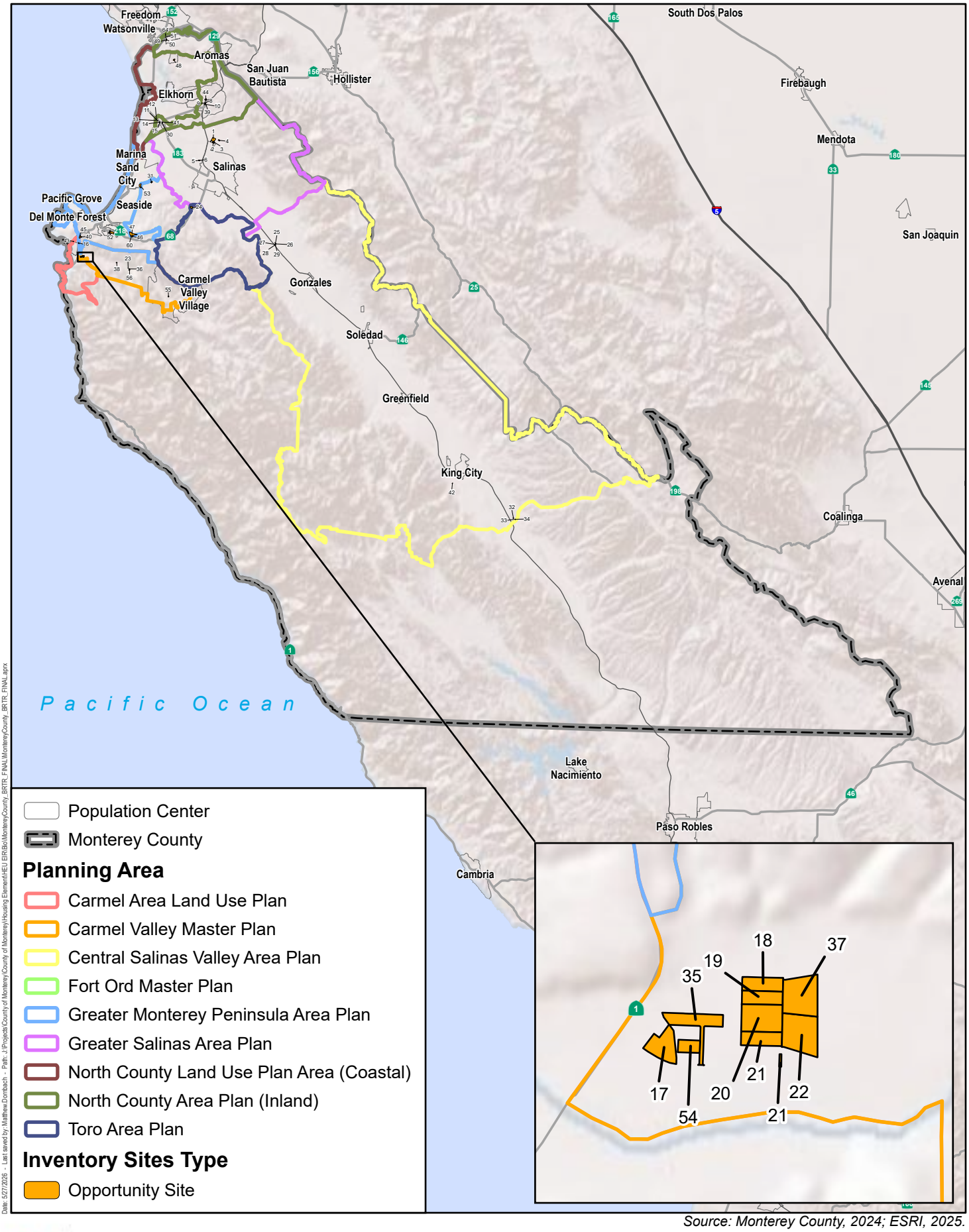



*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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**Figure 2i**

Project Location - Opportunity Sites in the Toro Area Plan

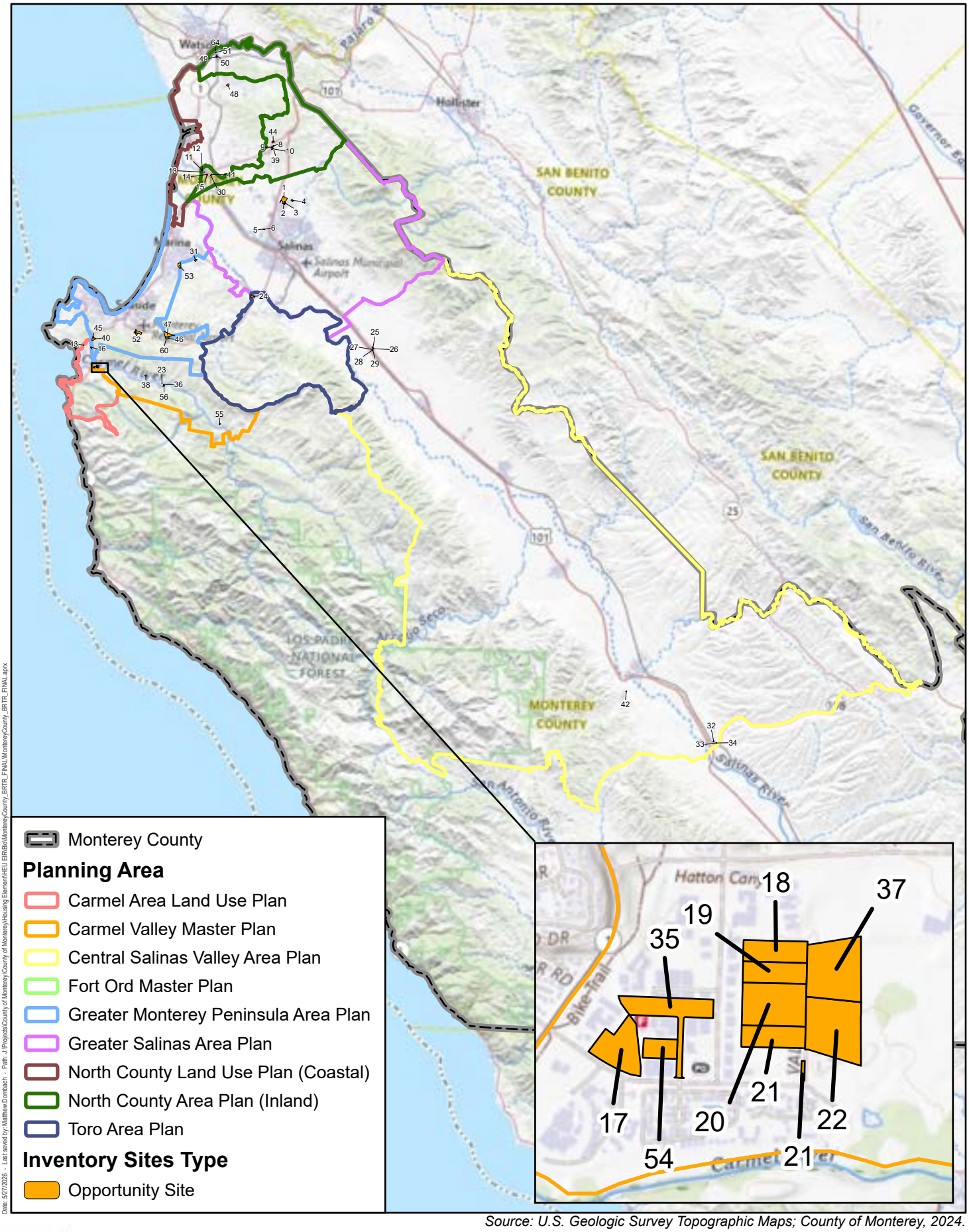



*Source: Monterey County, 2024; ESRI, 2025.*

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**Figure 2**

Project Location - Index




*Source: U.S. Geologic Survey Topographic Maps; County of Monterey, 2024.*

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**Figure 3**

USGS Topographic Map - Index

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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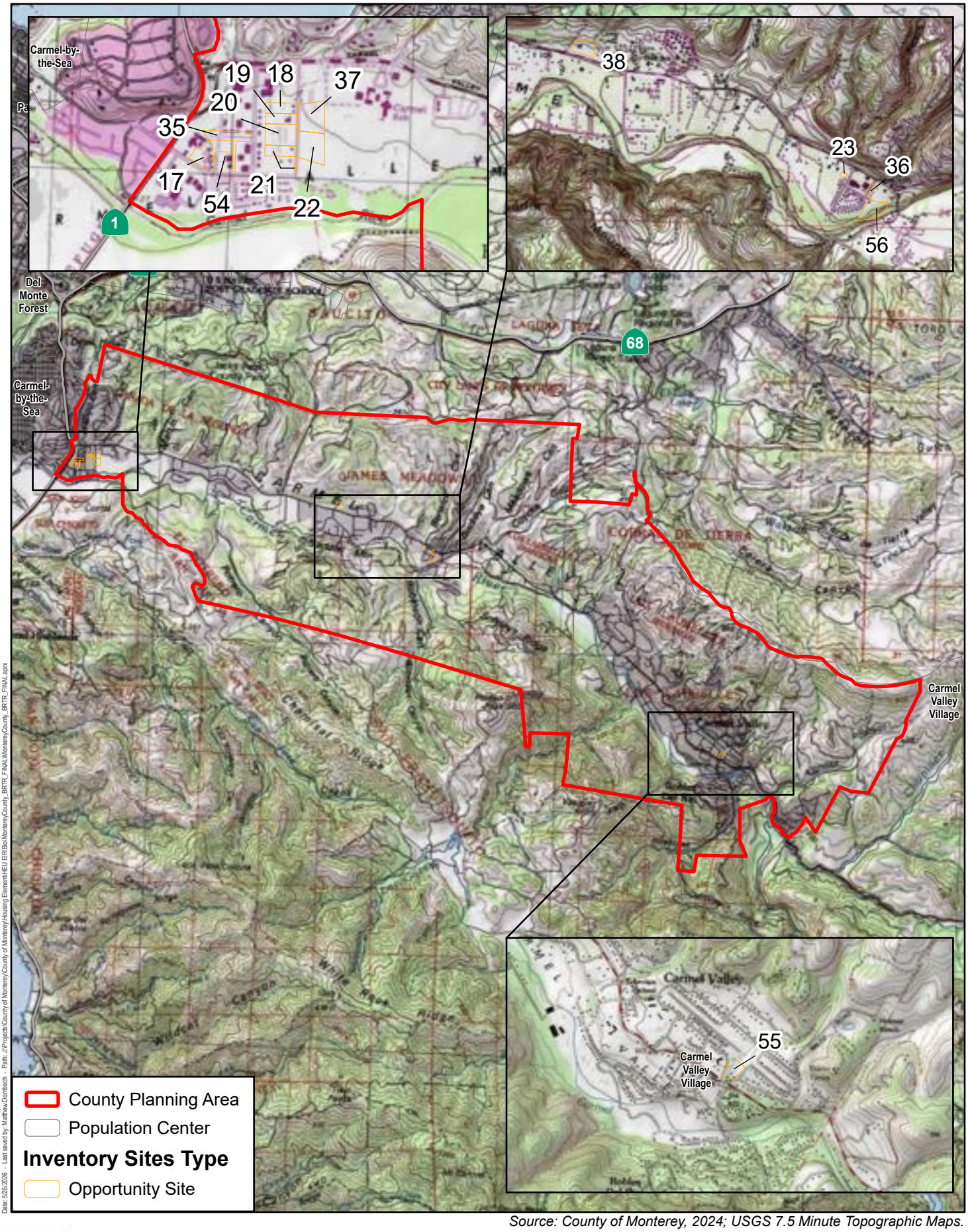
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**Figure 3a**

USGS Topographic Map in Carmel Area Land Use Plan

County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031)




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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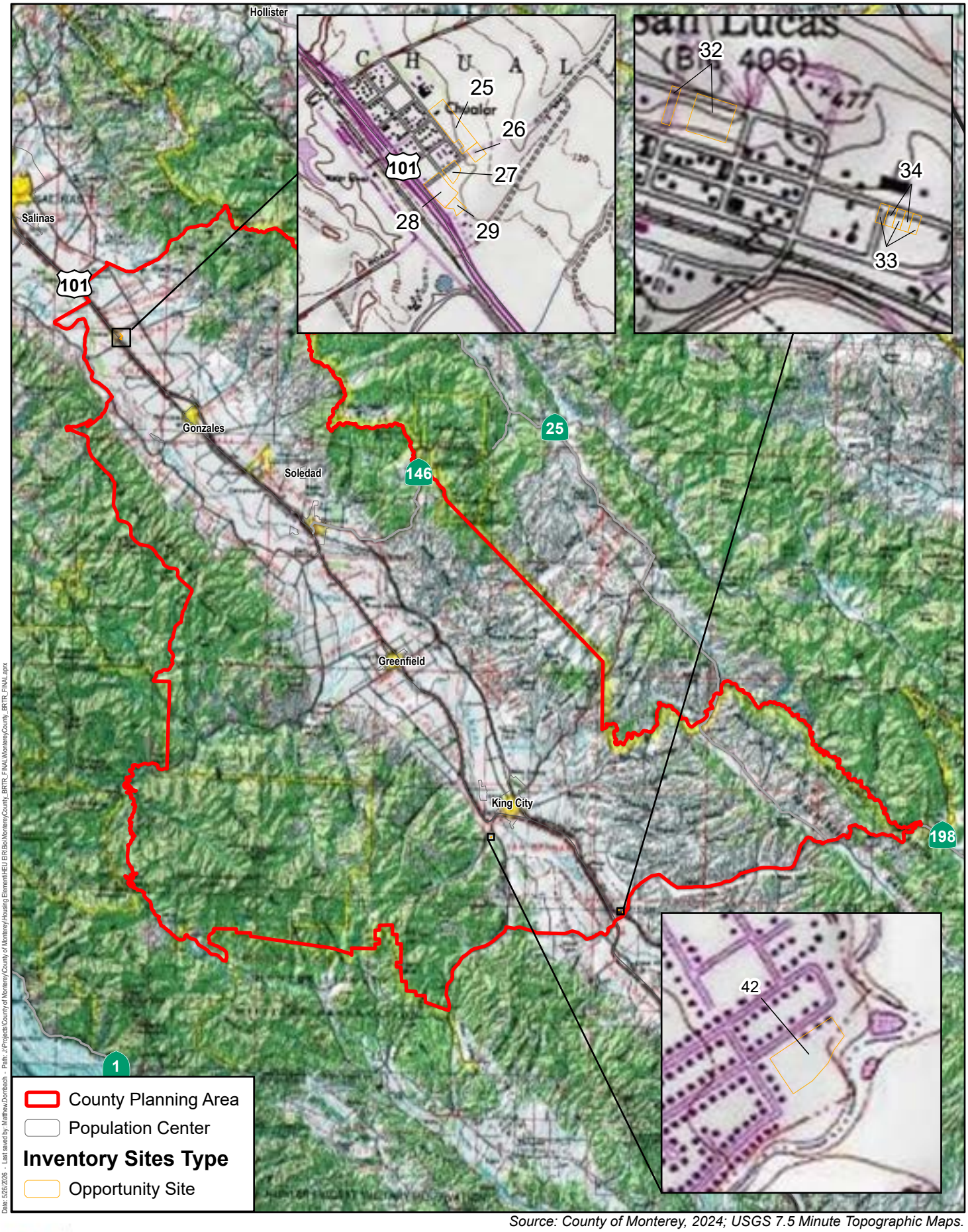
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**Figure 3b**

USGS Topographic Map in Carmel Valley Master Plan




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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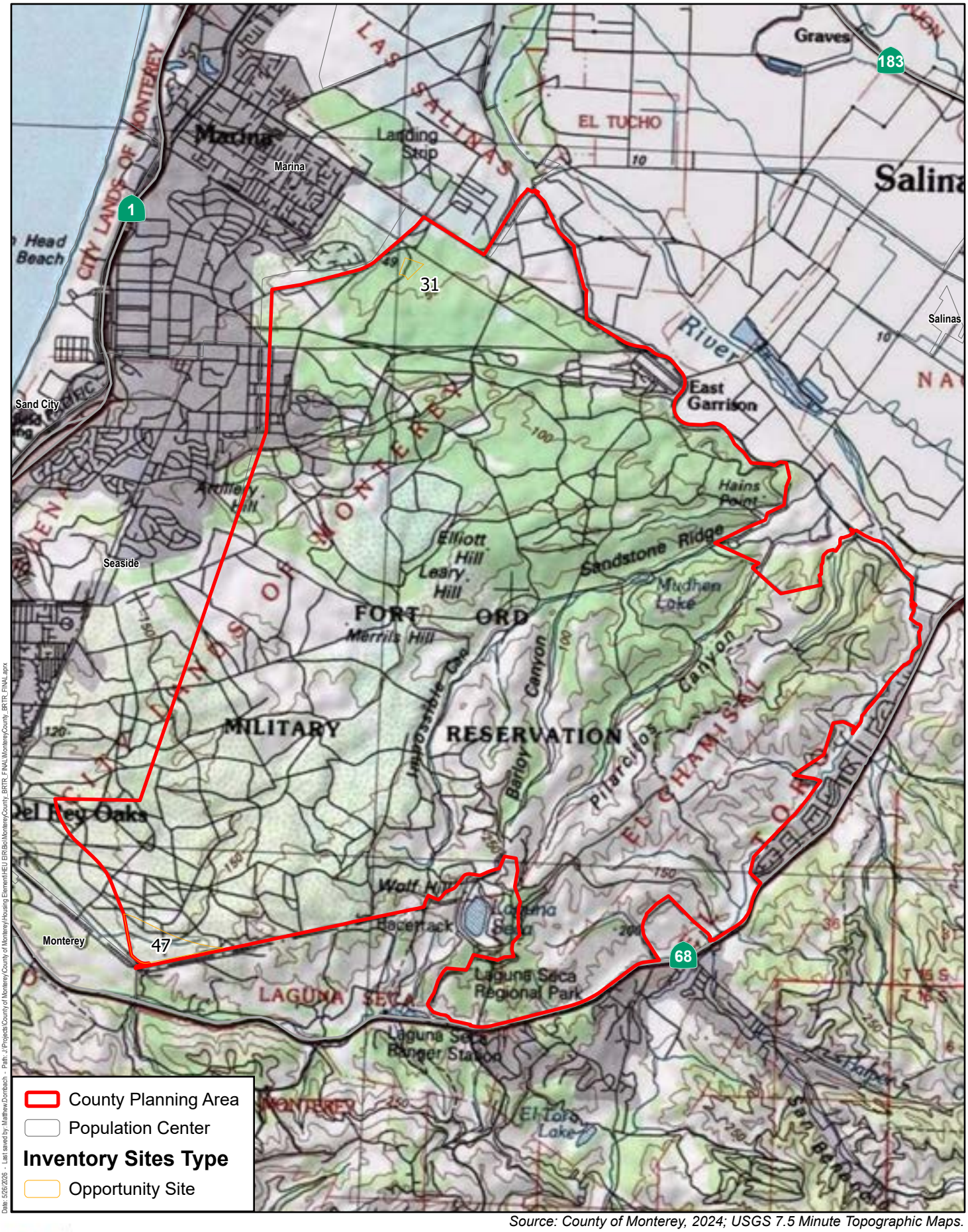
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**Figure 3c**

USGS Topographic Map in Central Salinas Valley Area Plan




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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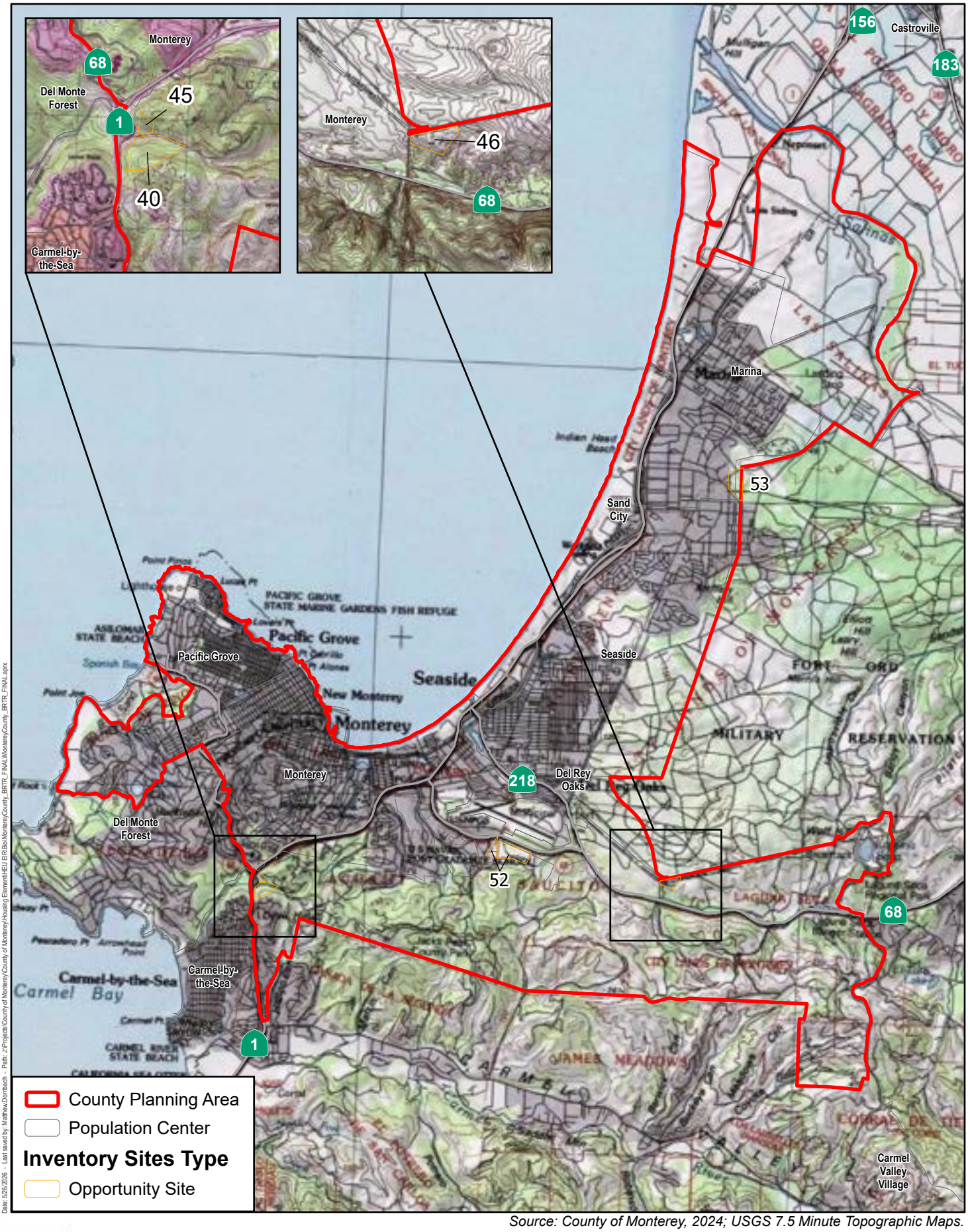
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**Figure 3d**

USGS Topographic Map in Fort Ord Master Plan




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

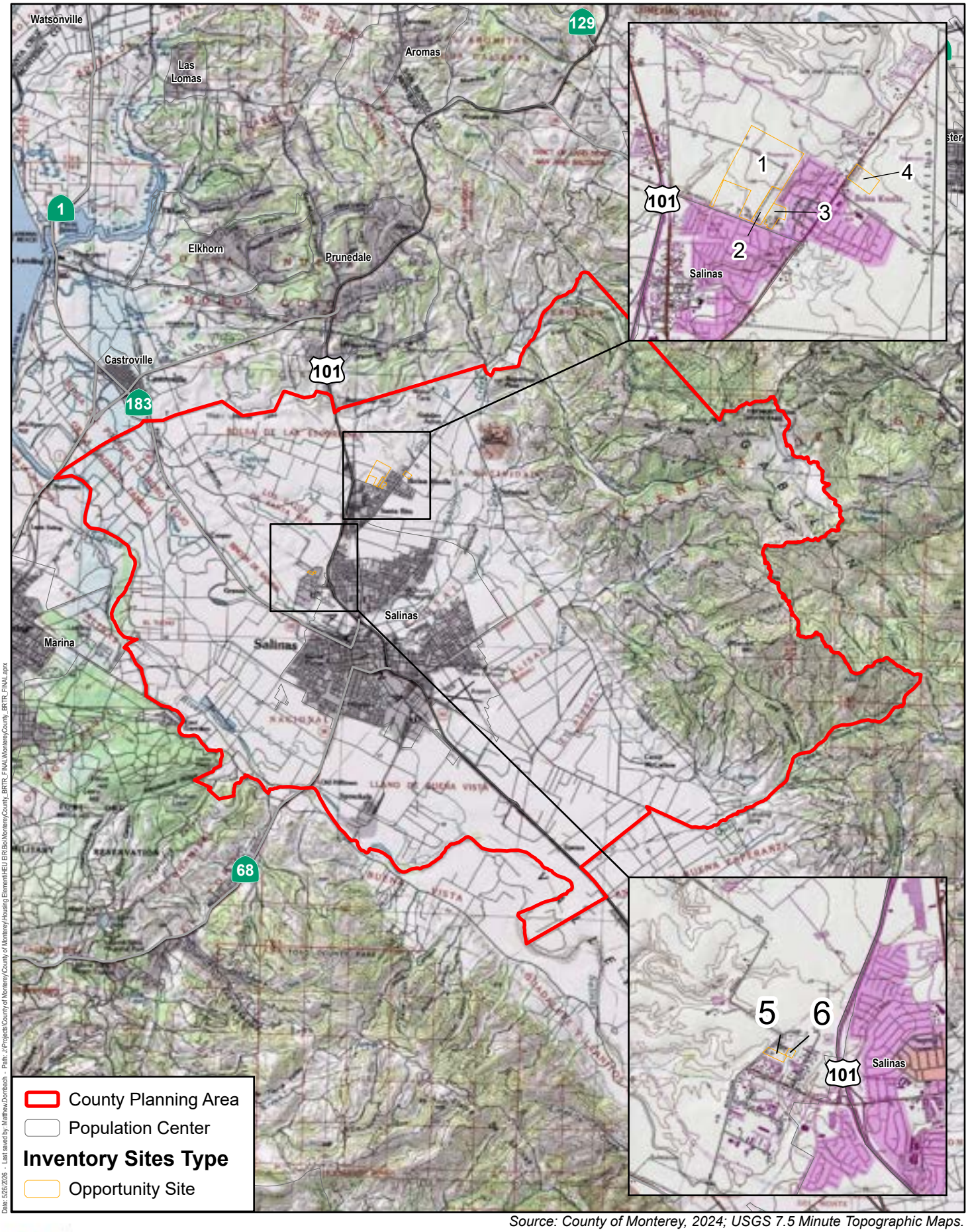
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**Figure 3e**

USGS Topographic Map in Greater Monterey Peninsula Area Plan




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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**Figure 3f**

USGS Topographic Map in Greater Salinas Area Plan



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*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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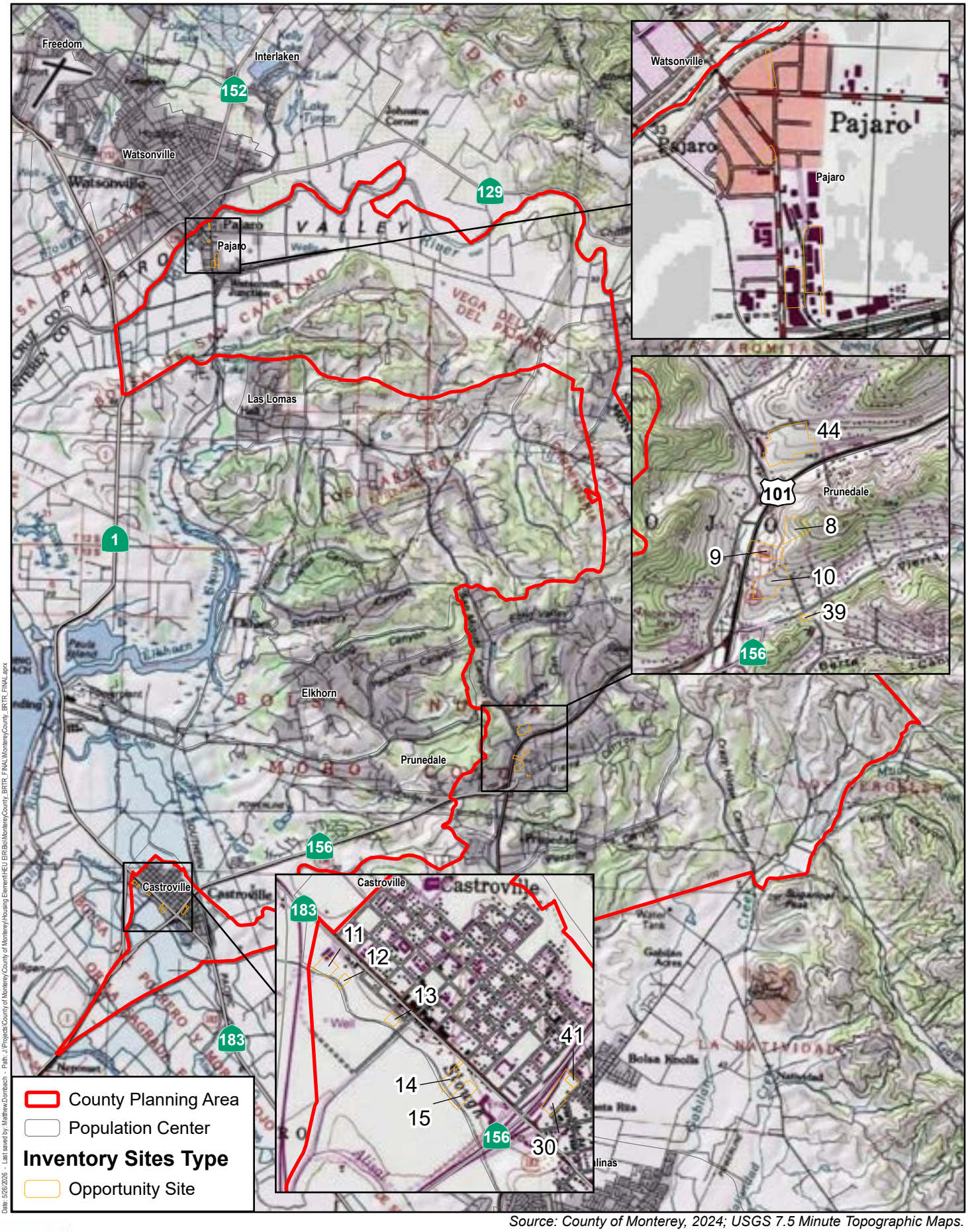
Miles

**Figure 3g**

USGS Topographic Map in North County Land Use Plan (Coastal)



Date: 5/26/2026 - Last saved by Matthew.Dontbeach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU BR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.

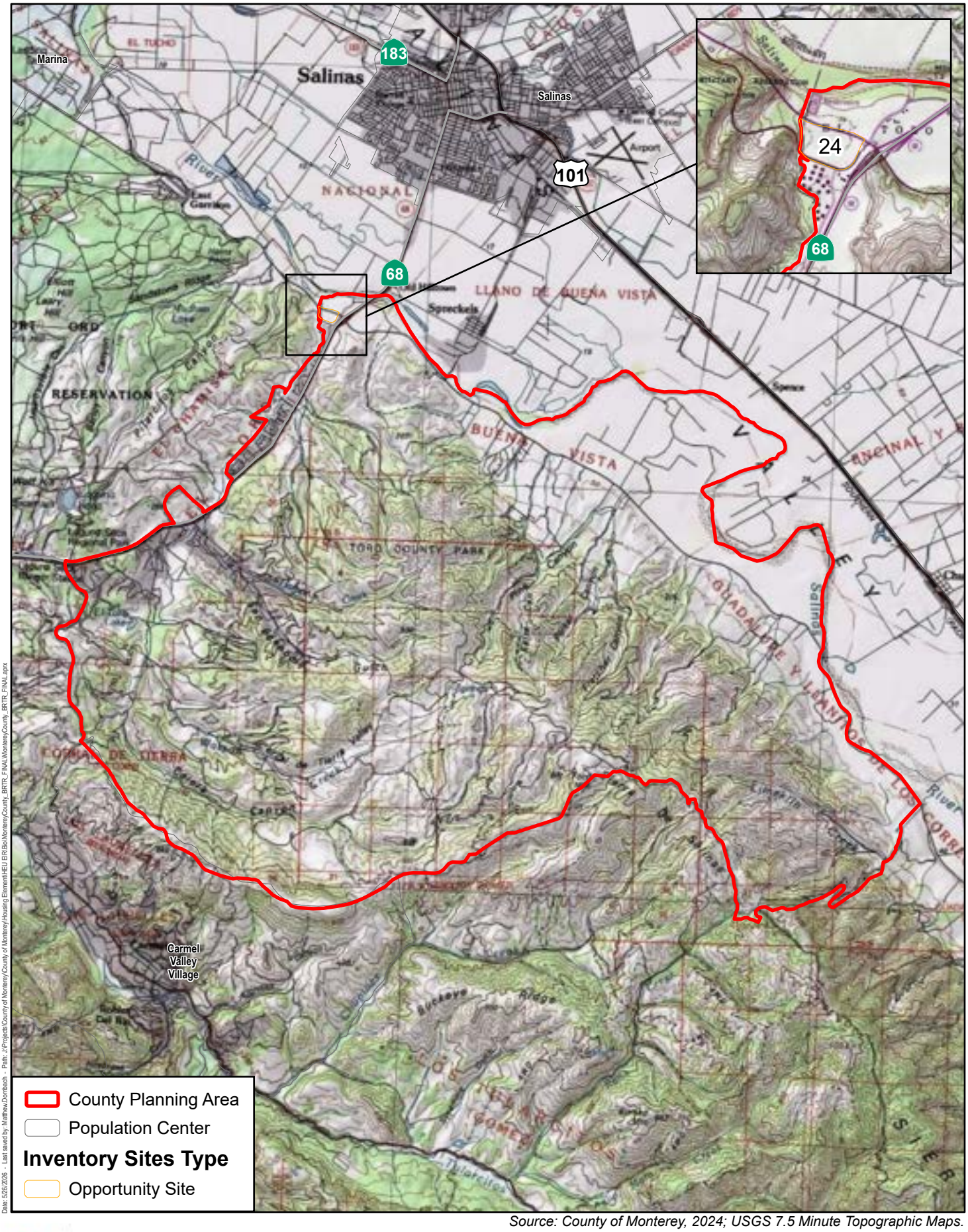
Harris & Associates

**Figure 3h**

USGS Topographic Map in North County Area Plan (Inland)



Date: 5/26/2026 - Last saved by Matthew.Dombach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.

Harris & Associates

N

0 1.25 2.5

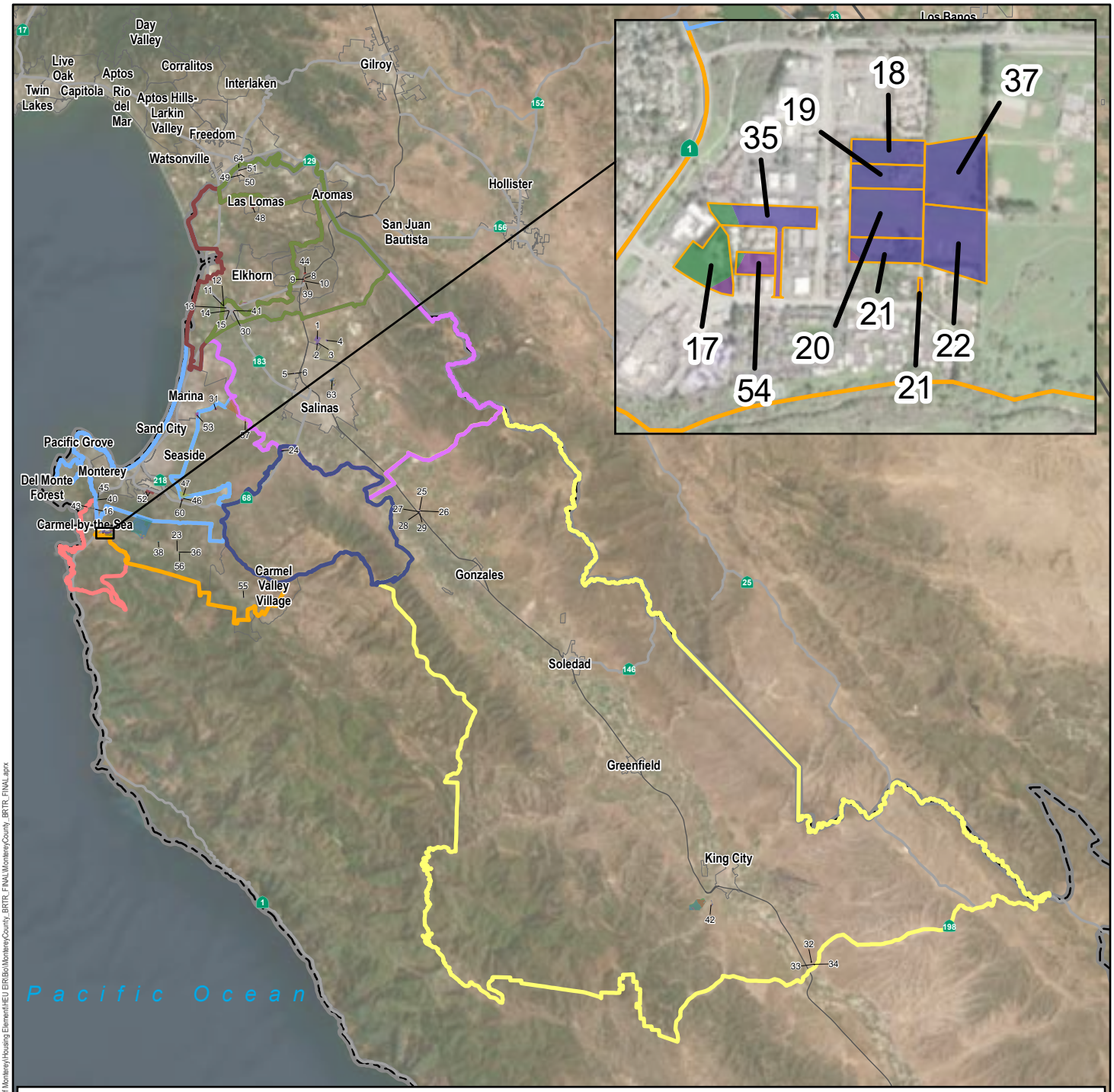
Miles

**Figure 3i**

USGS Topographic Map in Toro Area Plan



Date: 5/26/2026 - Last saved by Matthew.Dontbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




Population Center

**Planning Area**

- Carmel Area Land Use Plan
- Carmel Valley Master Plan
- Central Salinas Valley Area Plan
- Fort Ord Master Plan
- Greater Monterey Peninsula Area Plan
- Greater Salinas Area Plan
- North County Land Use Plan (Coastal)
- North County Area Plan (Inland)
- Toro Area Plan

**Soils**

- Alviso Silty Clay Loam
- Antioch Very Fine Sandy Loam
- Arnold Loamy Sand
- Arnold-Santa Ynez Complex
- Arroyo Seco Gravelly Loam
- Baywood Sand
- Chamise Channery Loam
- Chamise Shaly Loam
- Chualar Loam
- Clear Lake Clay
- Corducci-Typic Xerofluvents
- Cropley Silty Clay
- Diablo Clay
- Dibble Silt Loam
- Elder Sandy Loam
- Elder Very Fine Sandy Loam
- Elkhorn Fine Sandy Loam
- Garey Sandy Loam
- Lockwood Channery Loam
- Lockwood Shaly Loam
- Metz Fine Sandy Loam
- Mocho Silt Loam
- Narlon Loamy Fine Sand
- Oceano Loamy Sand
- Pacheco Clay Loam
- Pico Fine Sandy Loam
- Placentia Sandy Loam
- Rincon Clay Loam
- Rock Outcrop-Xerorthent Association
- Salinas Clay Loam
- Santa Lucia Channery Clay Loa
- Santa Lucia Channery Clay Loam
- Santa Lucia Shaly Clay Loam
- Santa Lucia-Reliz Association
- Santa Ynez Fine Sandy Loam
- Tujunga Fine Sand
- Water
- Xerorthents, Dissected
- Xerorthents, Loamy
- Xerorthents, Sandy

Date: 5/27/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2000; Maxar Imagery, 2023; Monterey County, 2024.*

Harris & Associates

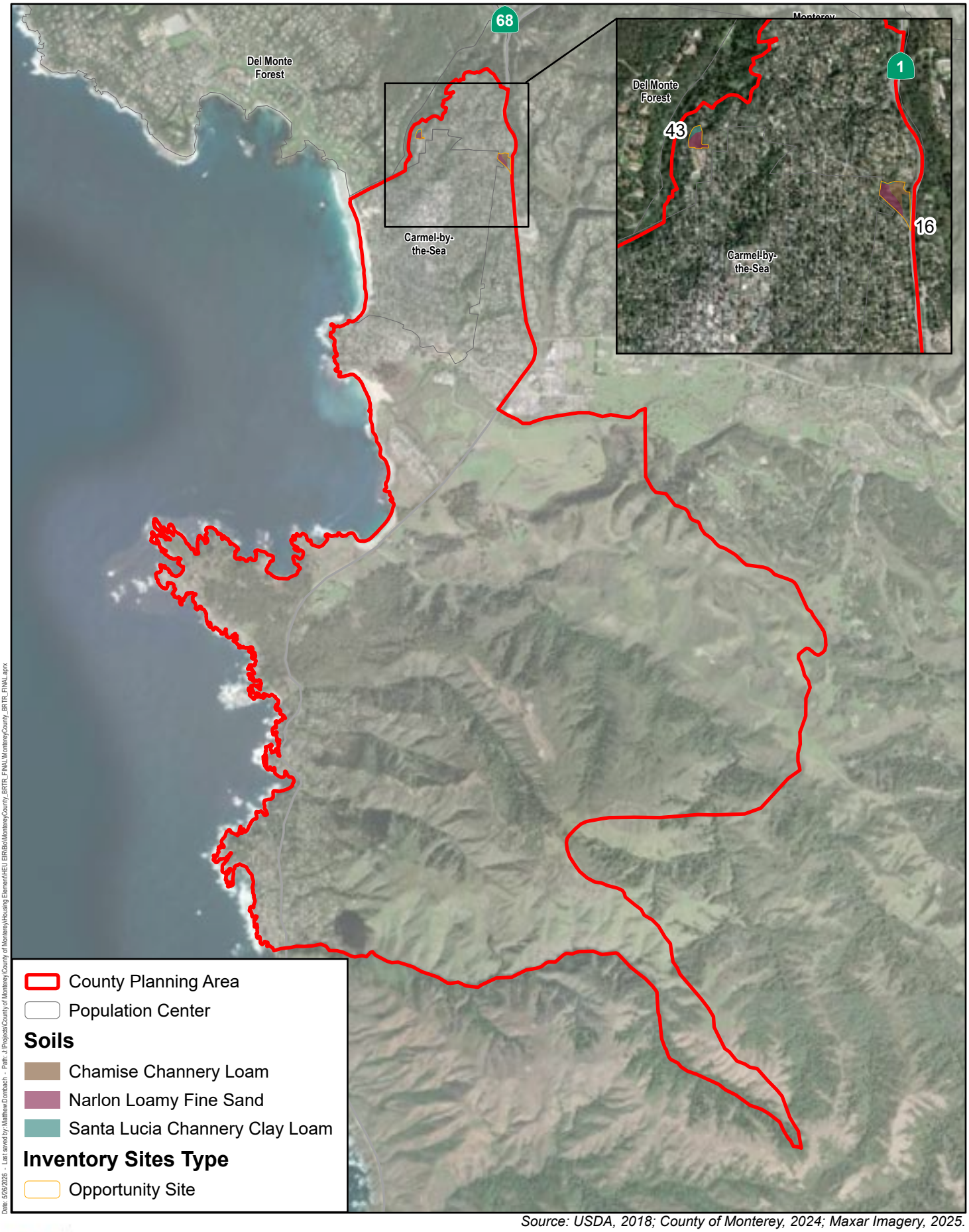
N

0 5 10

Miles

**Figure 4**

Soils - Index



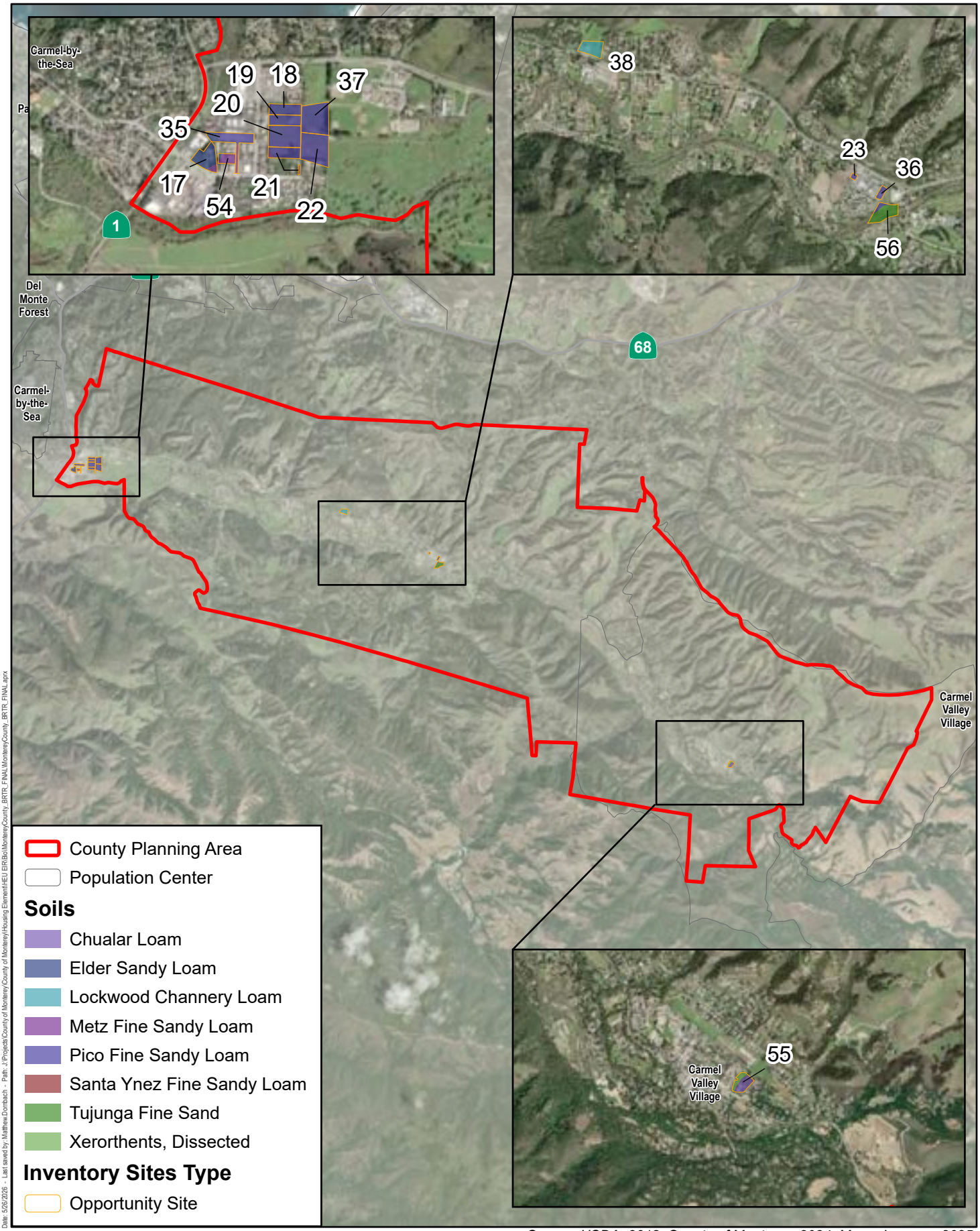

Date: 5/26/2026 - Last saved by Matthew.Dornbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

**Figure 4a**

Soils in Carmel Area Land Use Plan




Date: 5/26/2026 - Last saved by Matthew.Dorrbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

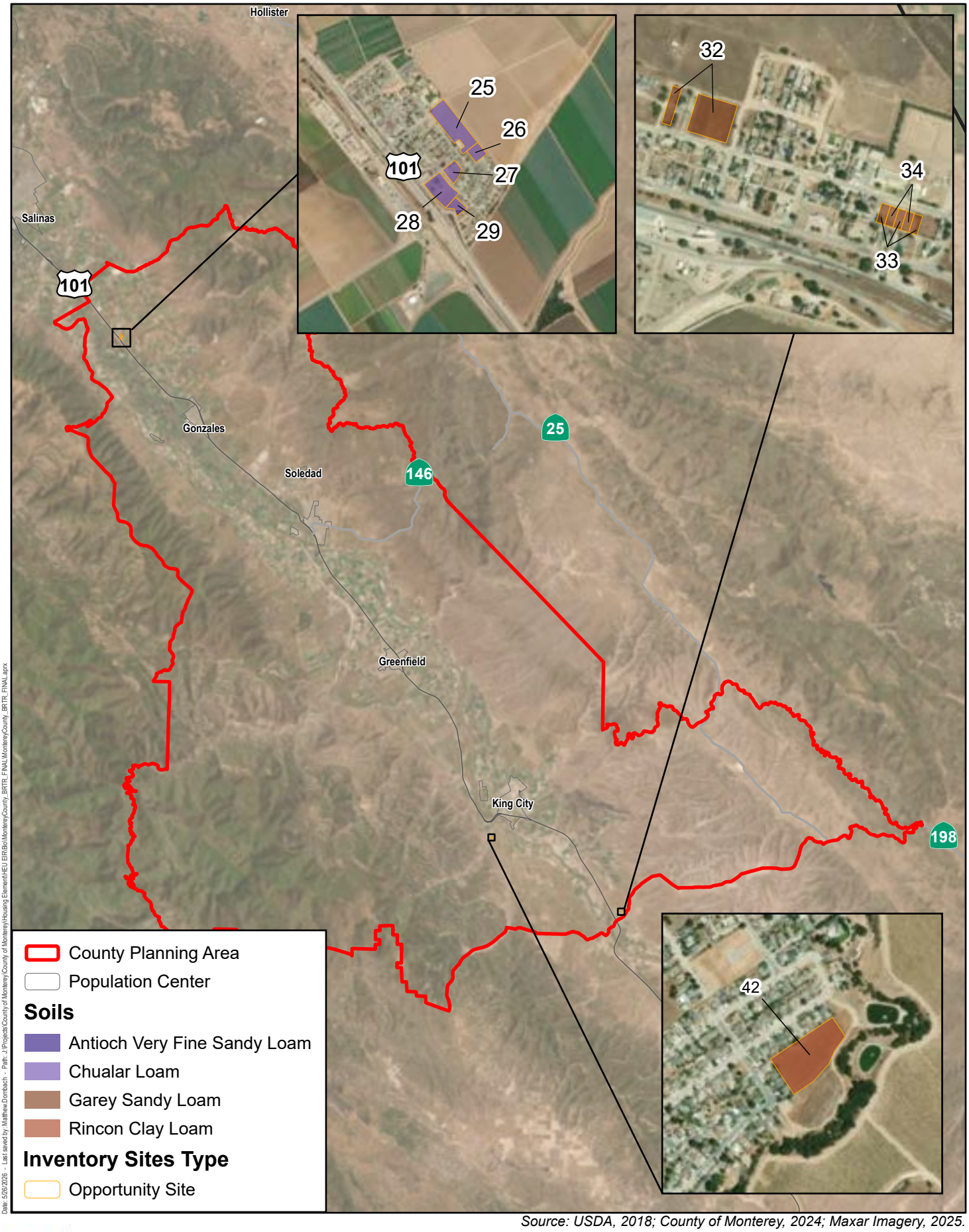
0 1.25 2.5

Miles

**Figure 4b**

Soils in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

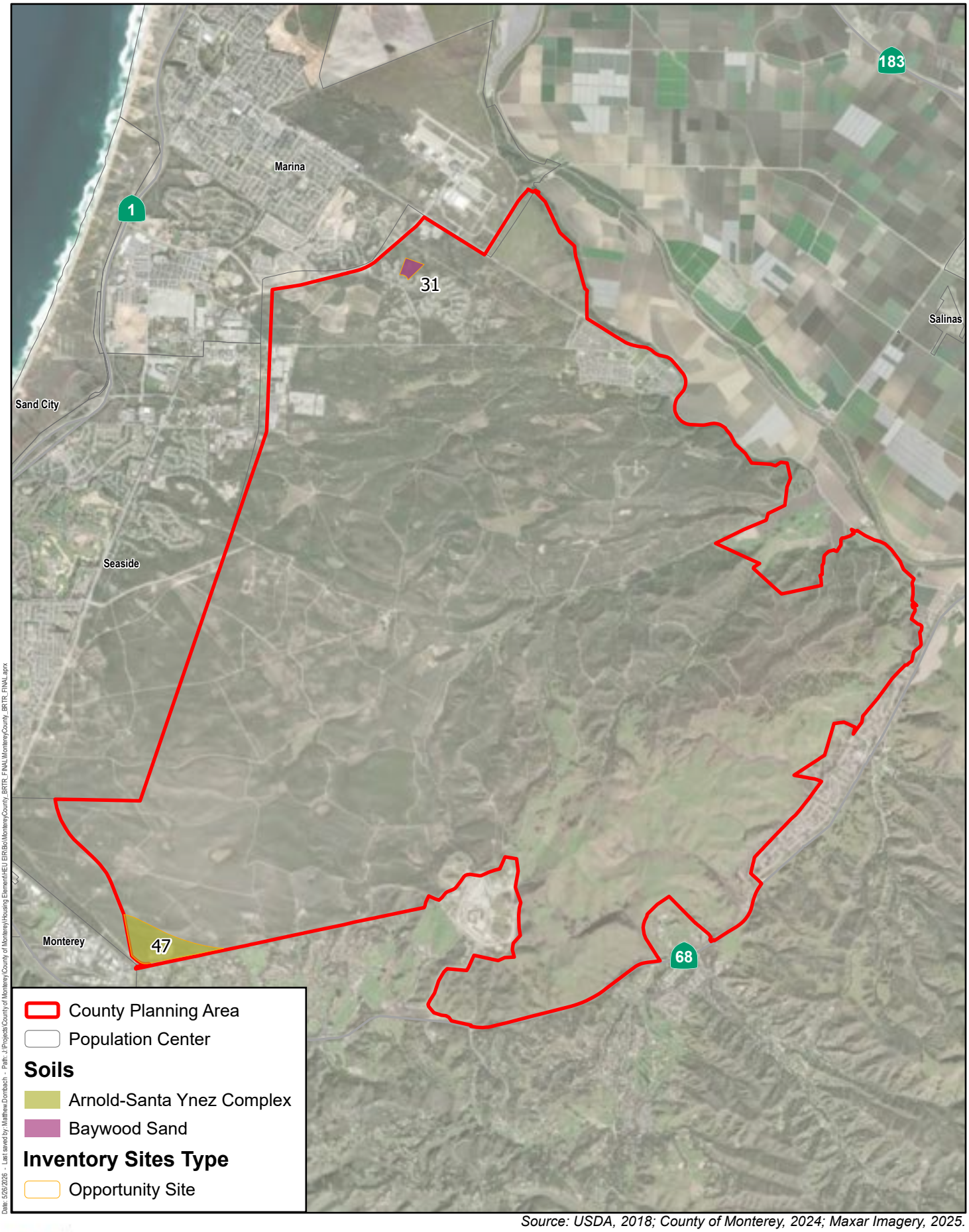
N

0 4.5 9

Miles

**Figure 4c**

Soils in Central Salinas Valley Area Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

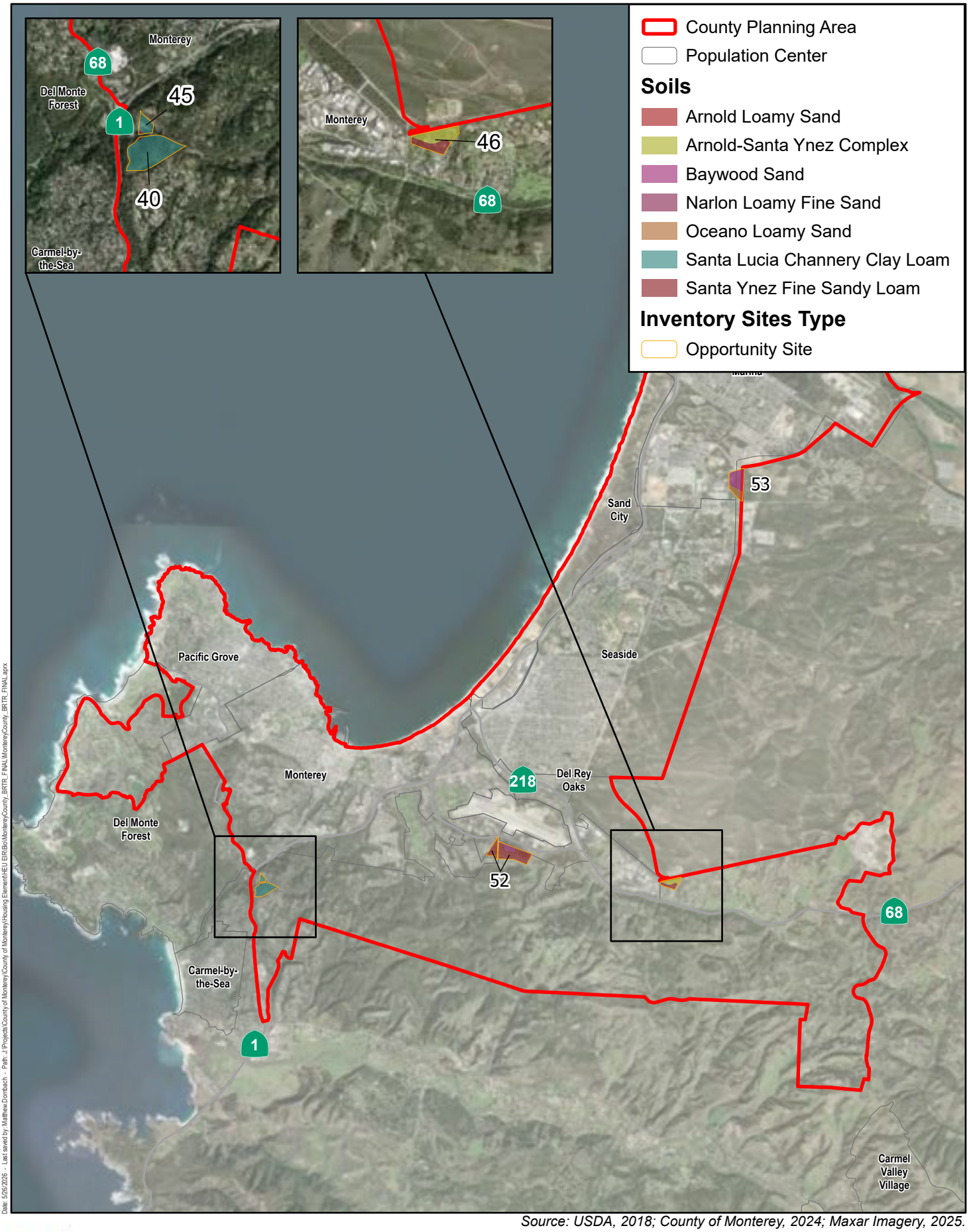
N

0 0.75 1.5

Miles

**Figure 4d**

Soils in Fort Ord Master Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

0 1.25 2.5

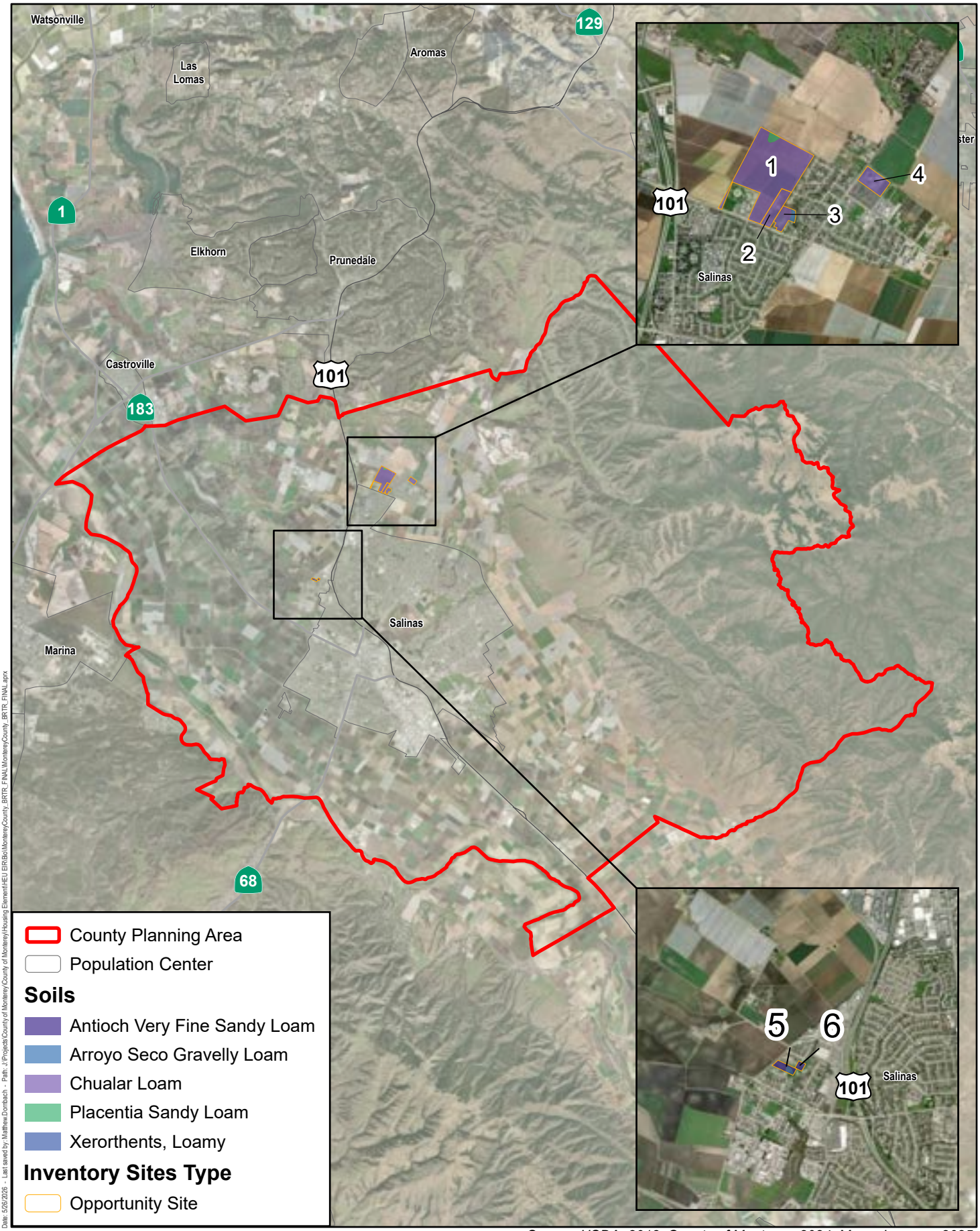
Miles

**Figure 4e**

Soils in Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

Date: 5/26/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU BR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

0 2 4

Miles

**Figure 4f**

Soils in Greater Salinas Area Plan




Date: 5/26/2026 - Last saved by MatthewDornbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Gis\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

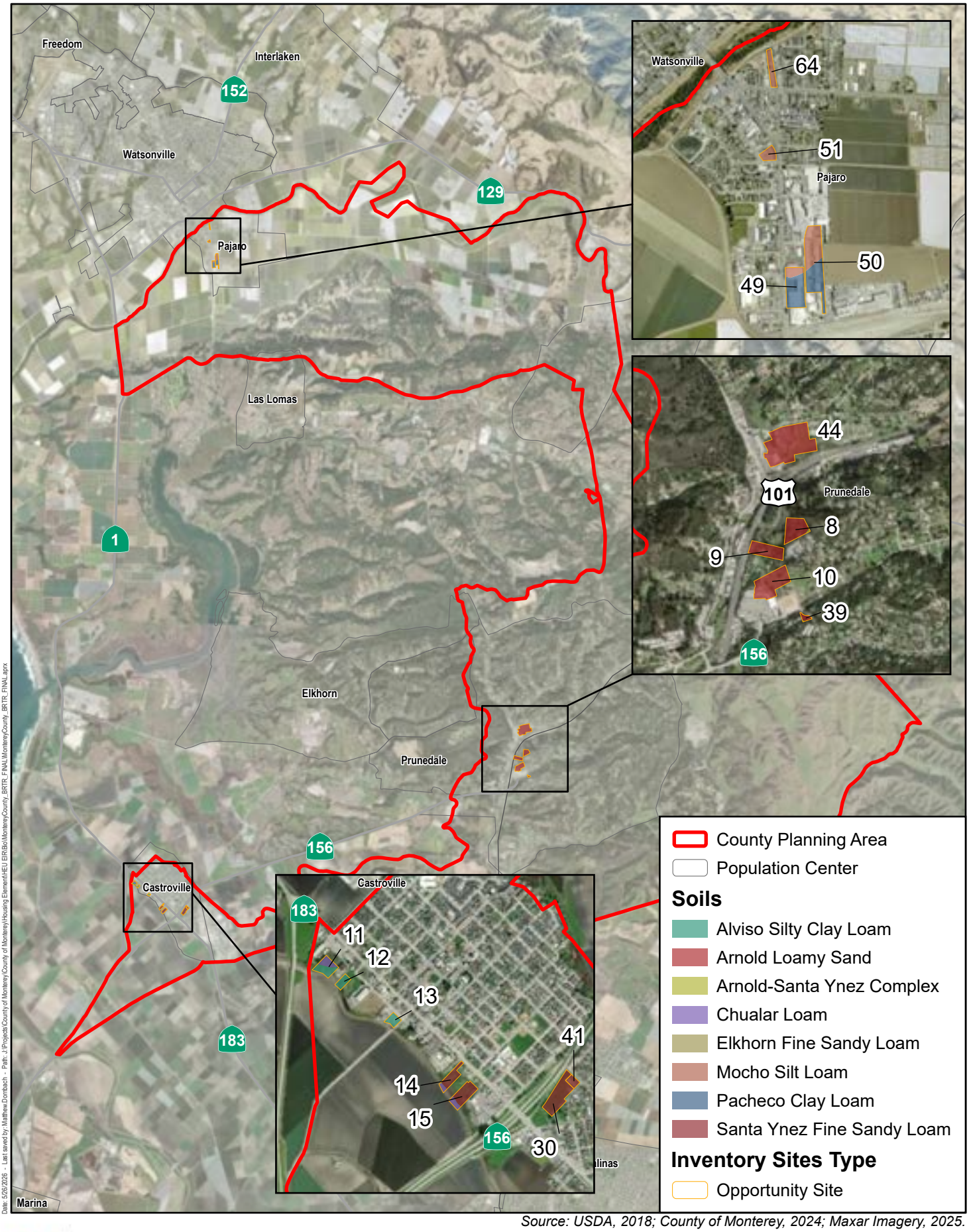
0 1 2

Miles

**Figure 4g**

Soils in North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

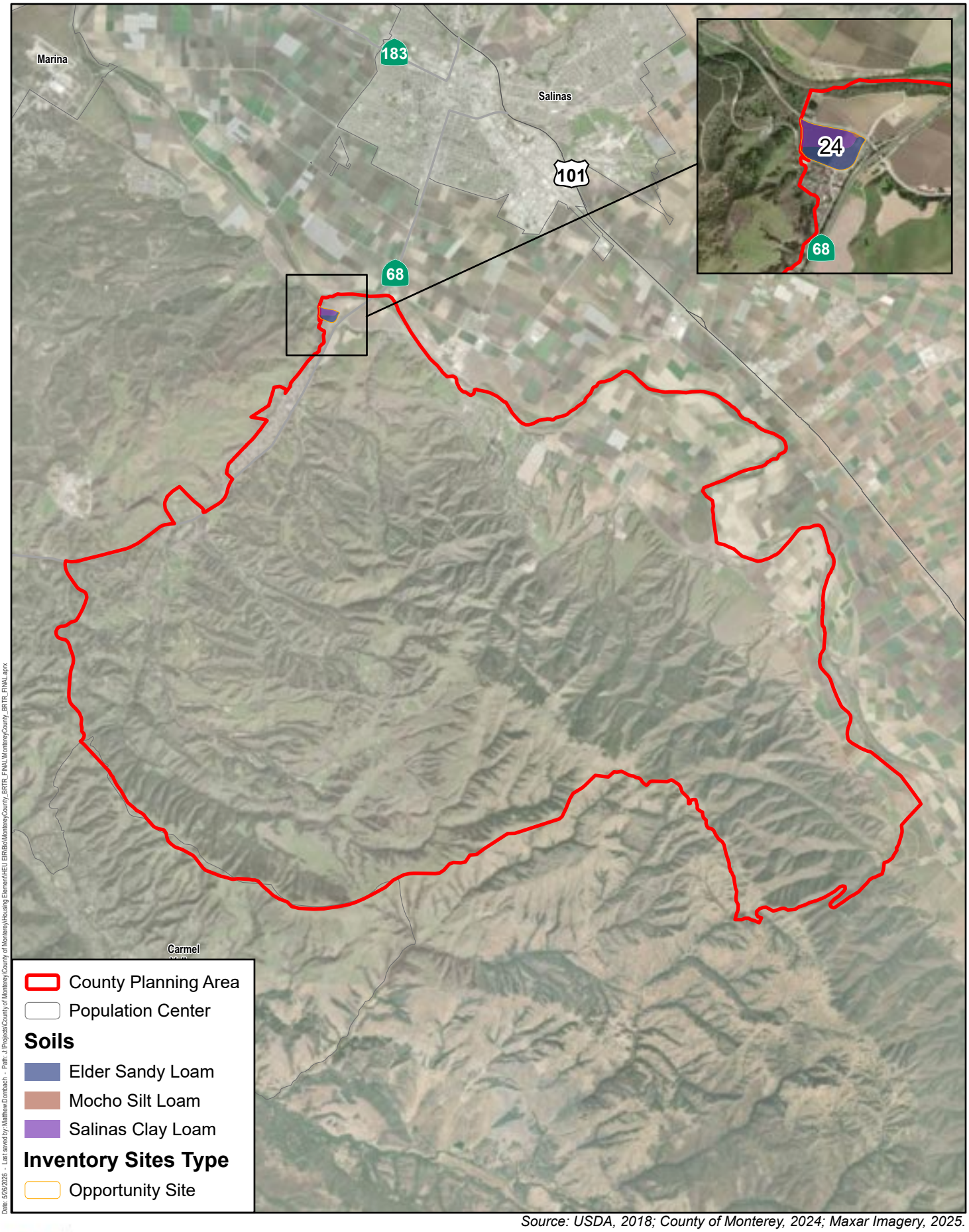
0 1.25 2.5

Miles

**Figure 4h**

Soils in North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.

Harris & Associates

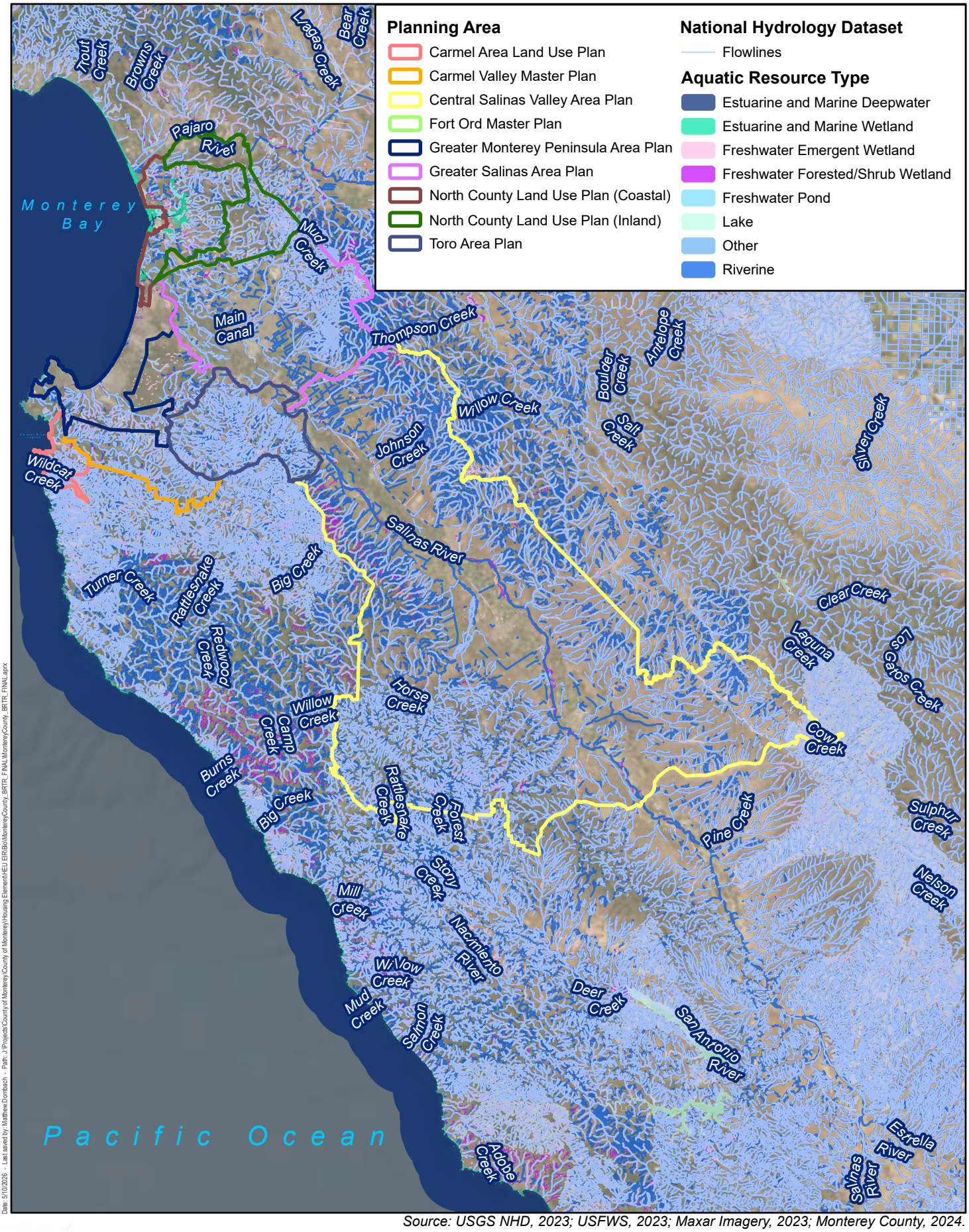
N

0 1.25 2.5

Miles

**Figure 4i**

Soils in Toro Area Plan




Source: USGS NHD, 2023; USFWS, 2023; Maxar Imagery, 2023; Monterey County, 2024.

Harris & Associates

N

0 5 10

Miles

**Figure 5**

Hydrology - Index




Date: 5/27/2026 - Last saved by Matthew.Dontzech - Path: J:\Projects\County of Monterey\Housing Element\HEU BIR\Hydrology_Maps\book\Hydrology_Mapbook.aprx

*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

N

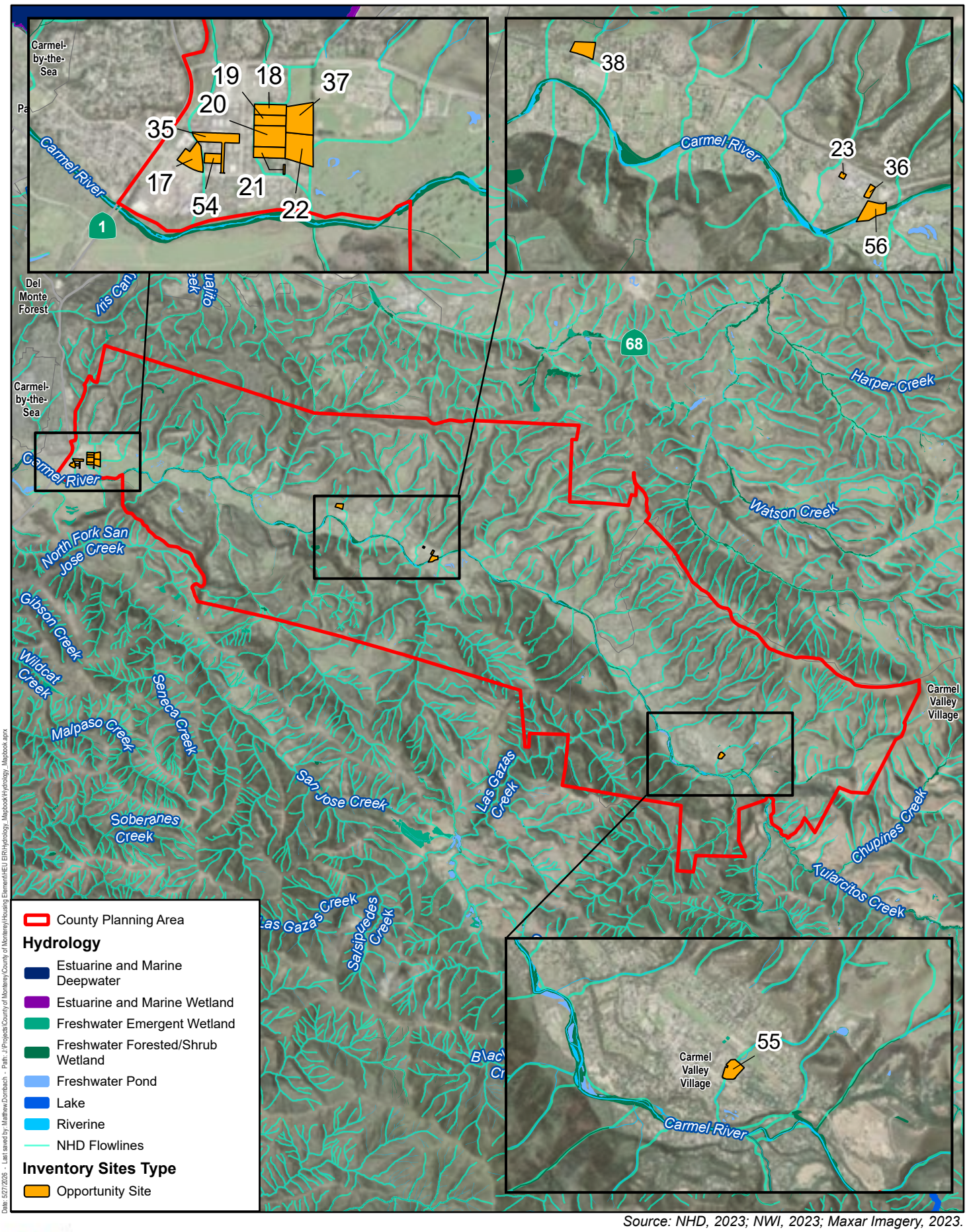
0 0.42 0.85

Miles

**Figure 5a**

Hydrology in Carmel Area Land Use Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

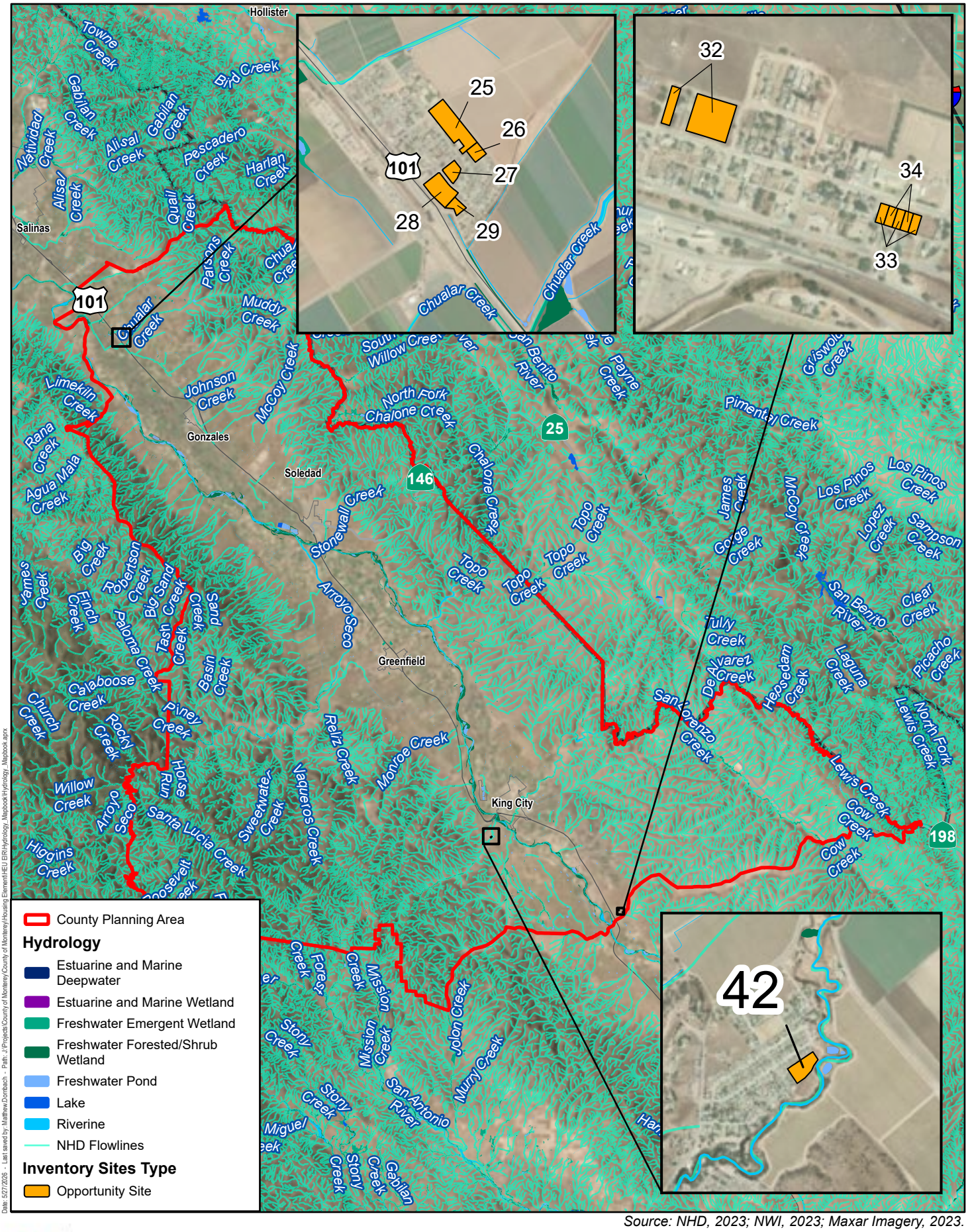



*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

**Figure 5b**

Hydrology in Carmel Valley Master Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

N

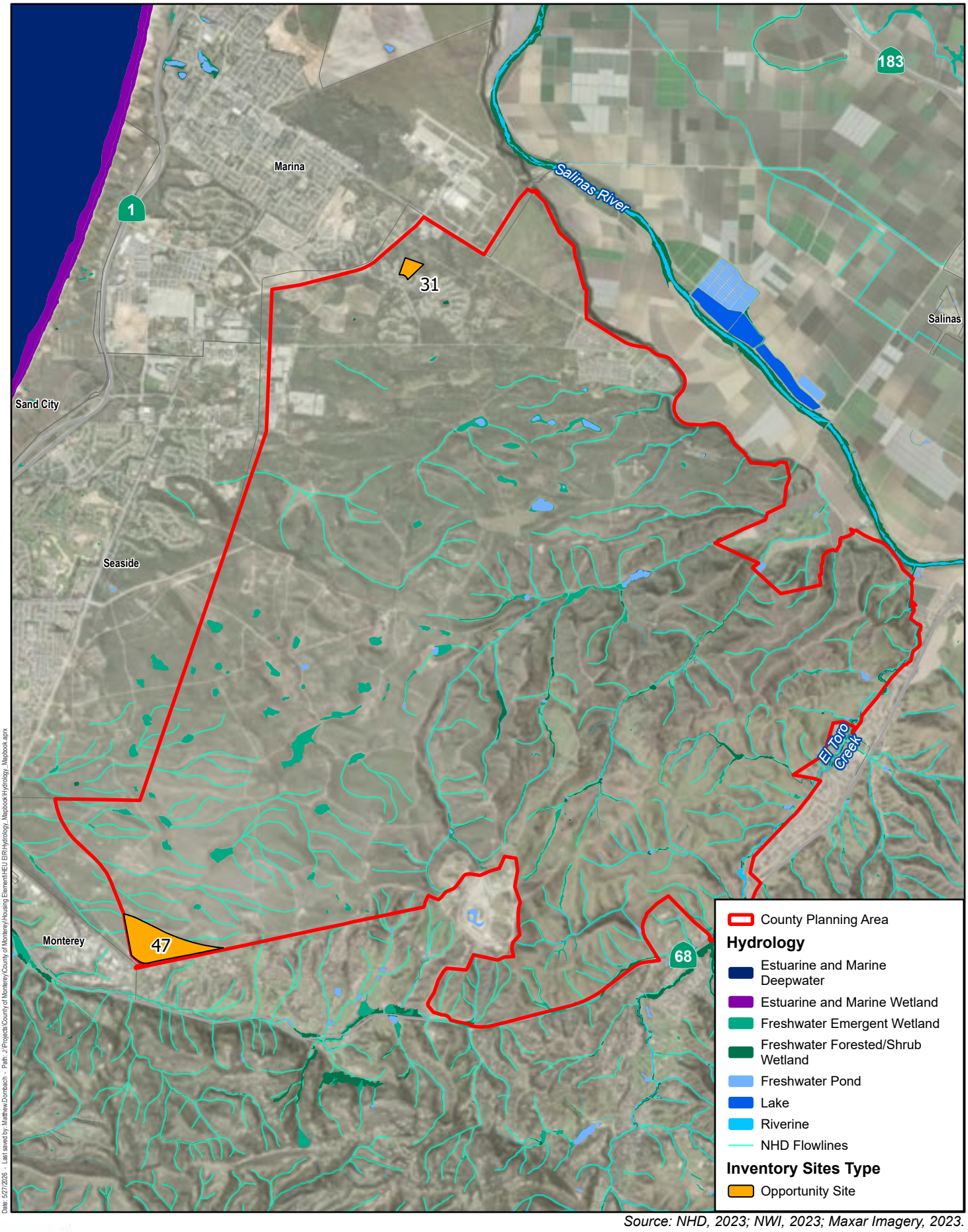
0 3.25 6.5

Miles

**Figure 5c**

Hydrology in Central Salinas Valley Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

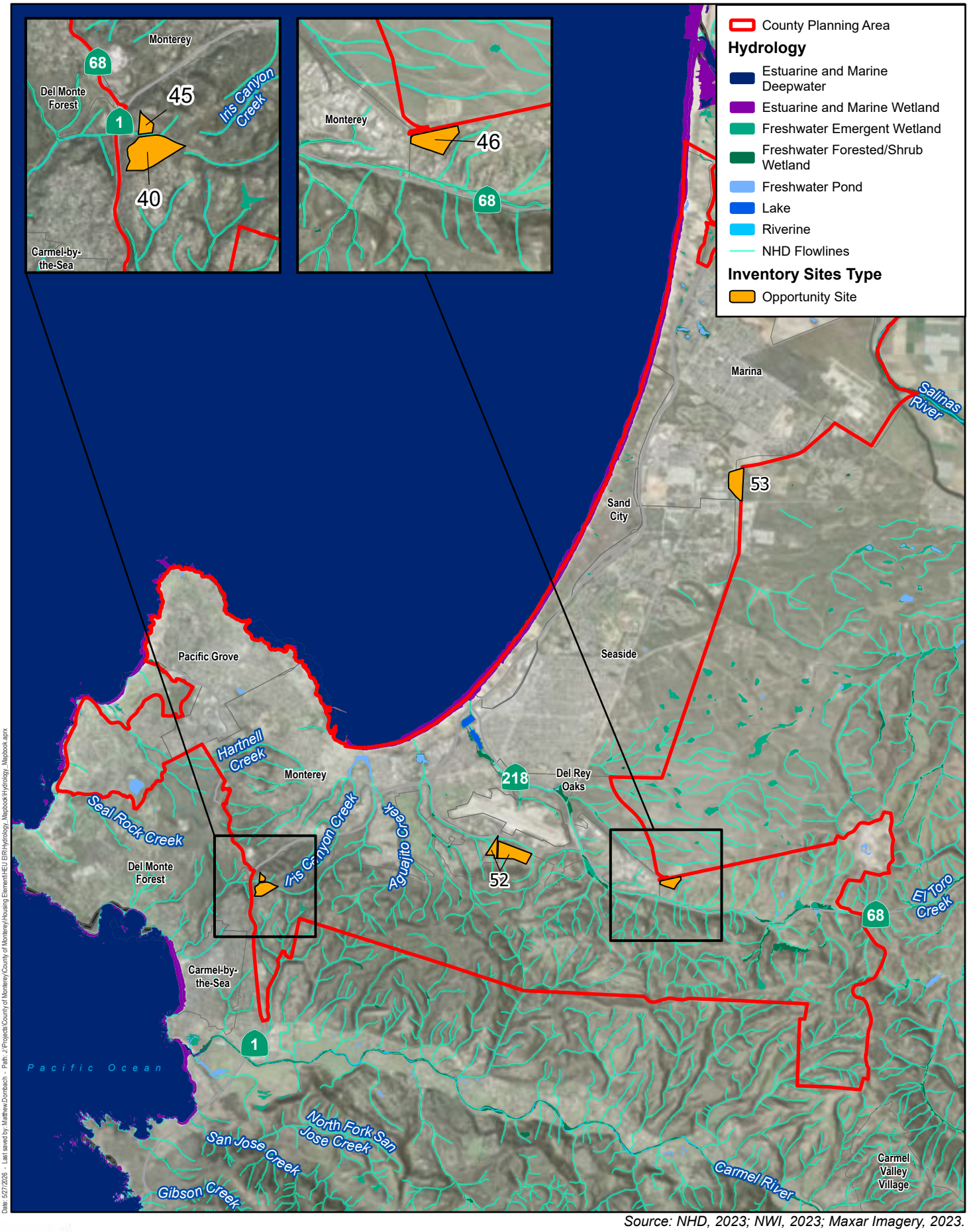
N

0 0.5 1

Miles

**Figure 5d**

Hydrology in Fort Ord Master Plan




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

N

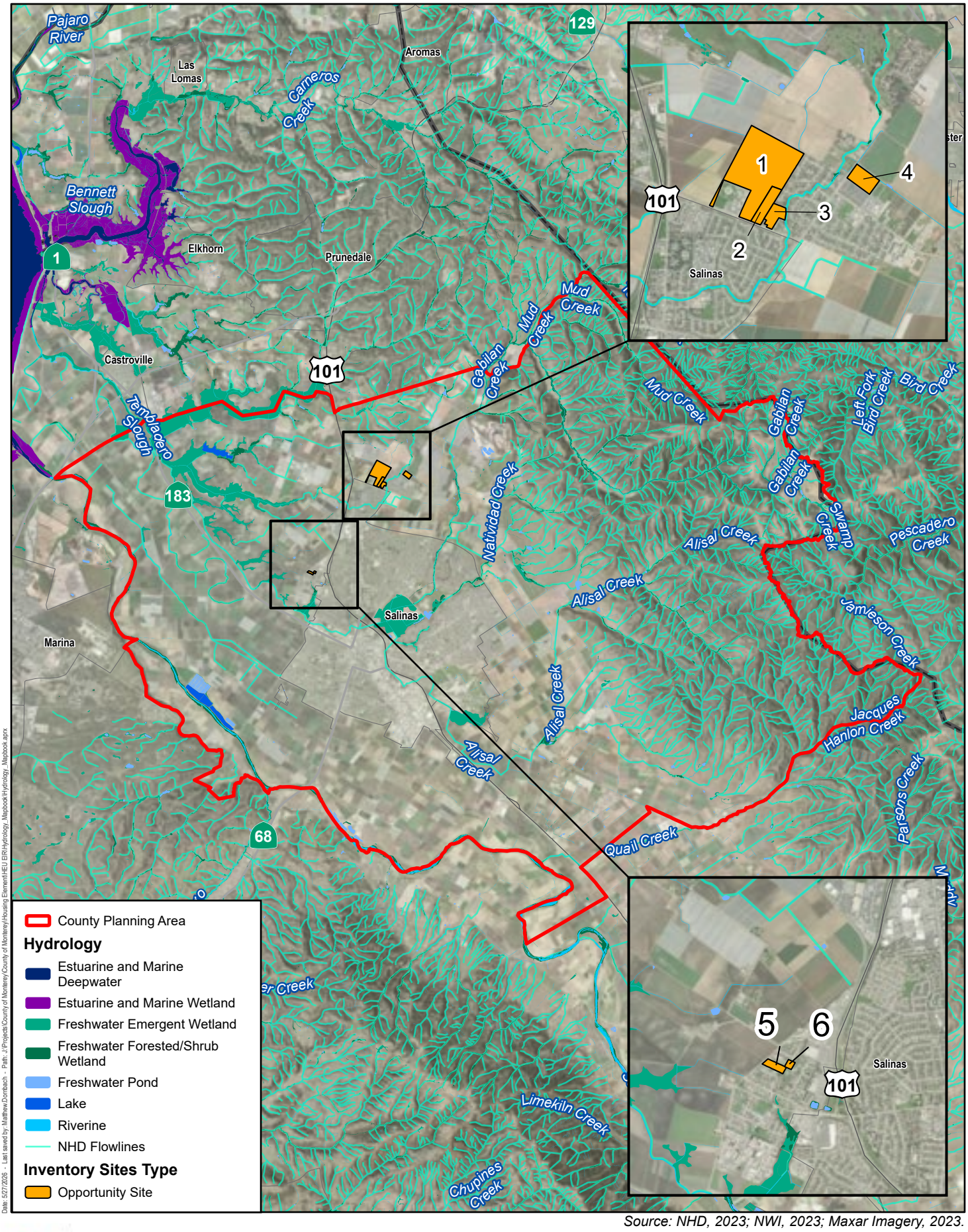
0 0.75 1.5

Miles

**Figure 5e**

Hydrology in Greater Monterey Peninsula Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

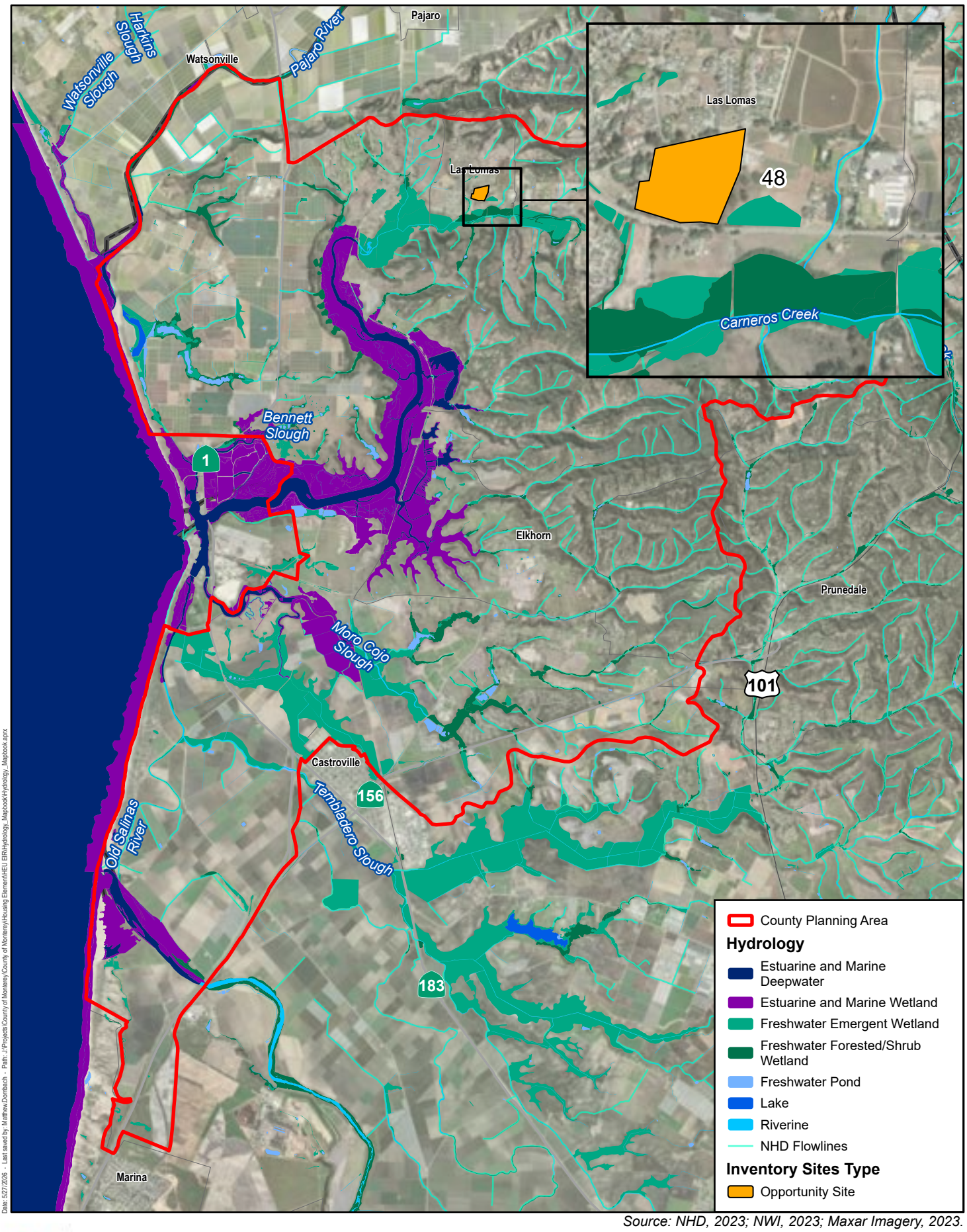
N

0 1.25 2.5

Miles

**Figure 5f**

Hydrology in Greater Salinas Area Plan




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

N

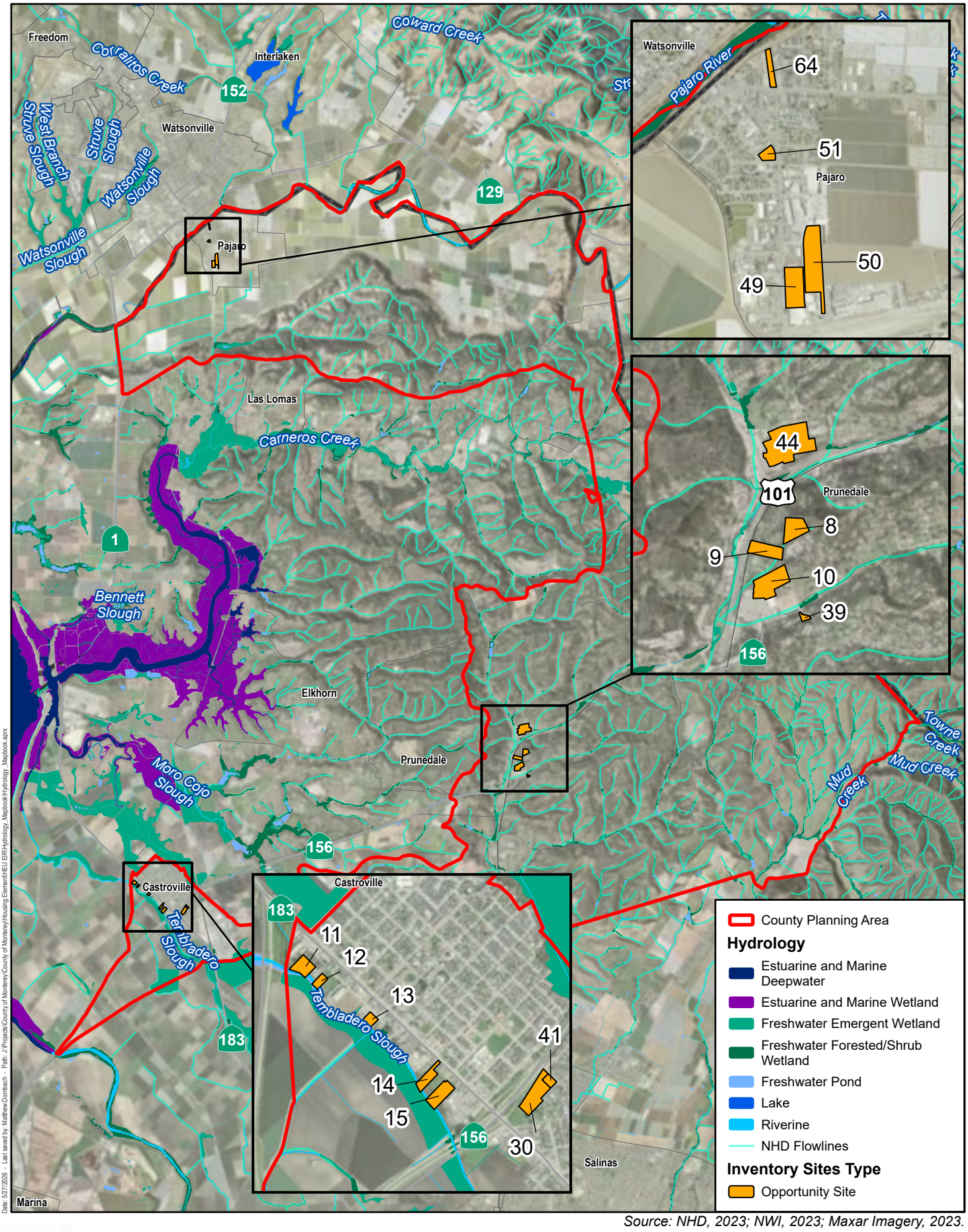
0 0.5 1

Miles

**Figure 5g**

Hydrology in North County Land Use Plan (Coastal)

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

N

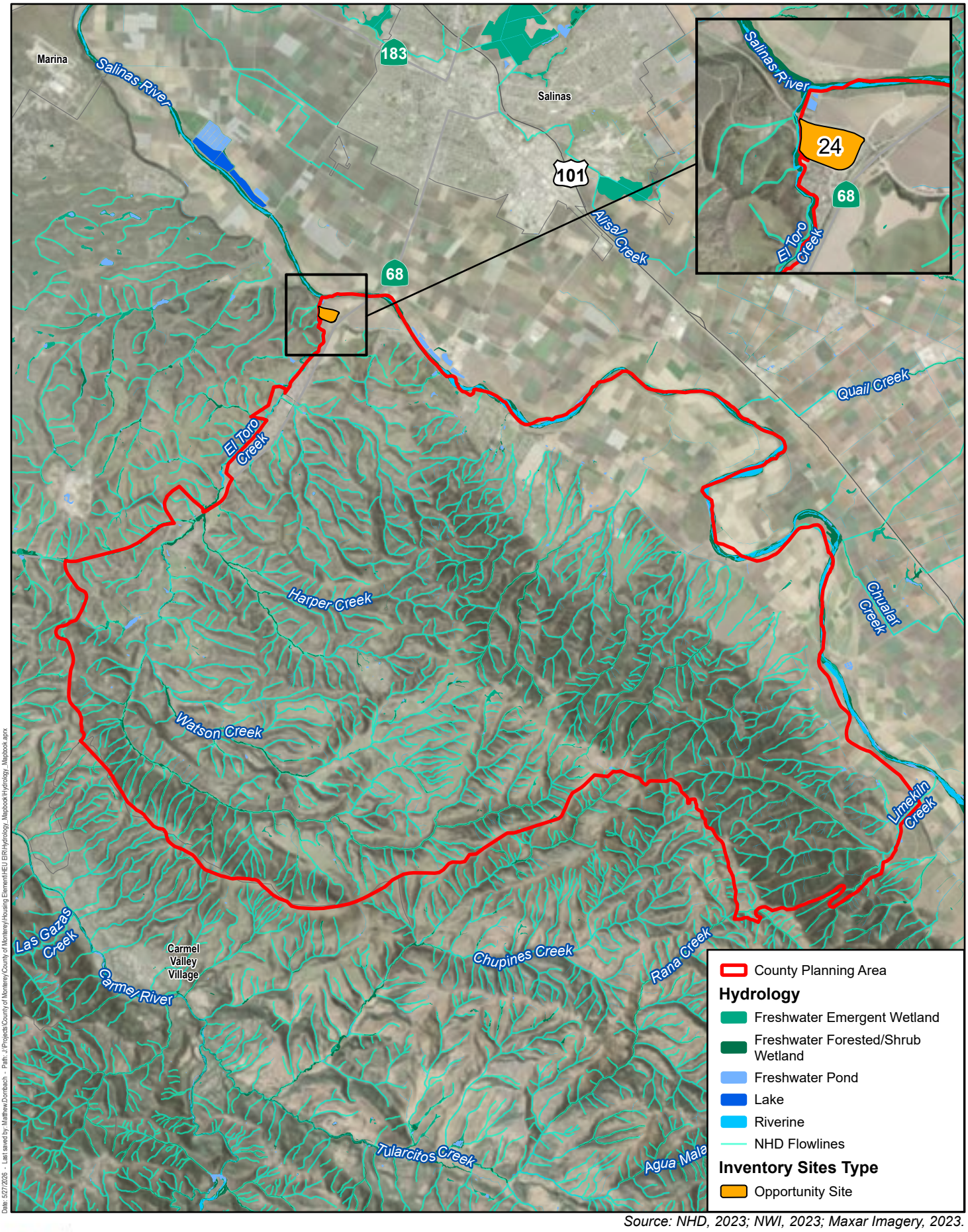
0 0.75 1.5

Miles

**Figure 5h**

Hydrology in North County Area Plan (Inland)

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: NHD, 2023; NWI, 2023; Maxar Imagery, 2023.*

Harris & Associates

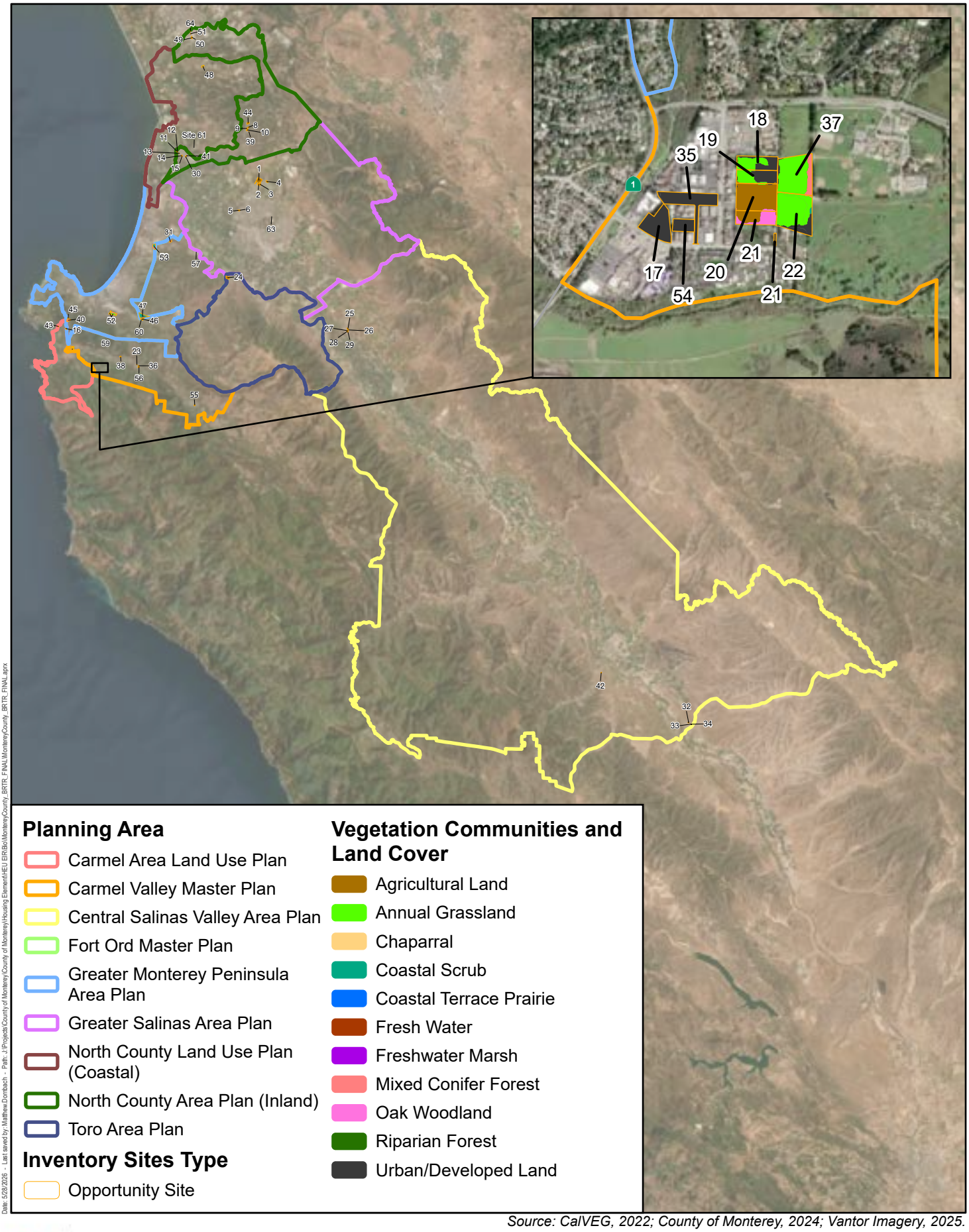
N

0 0.75 1.5

Miles

**Figure 5i**

Hydrology in Toro Area Plan



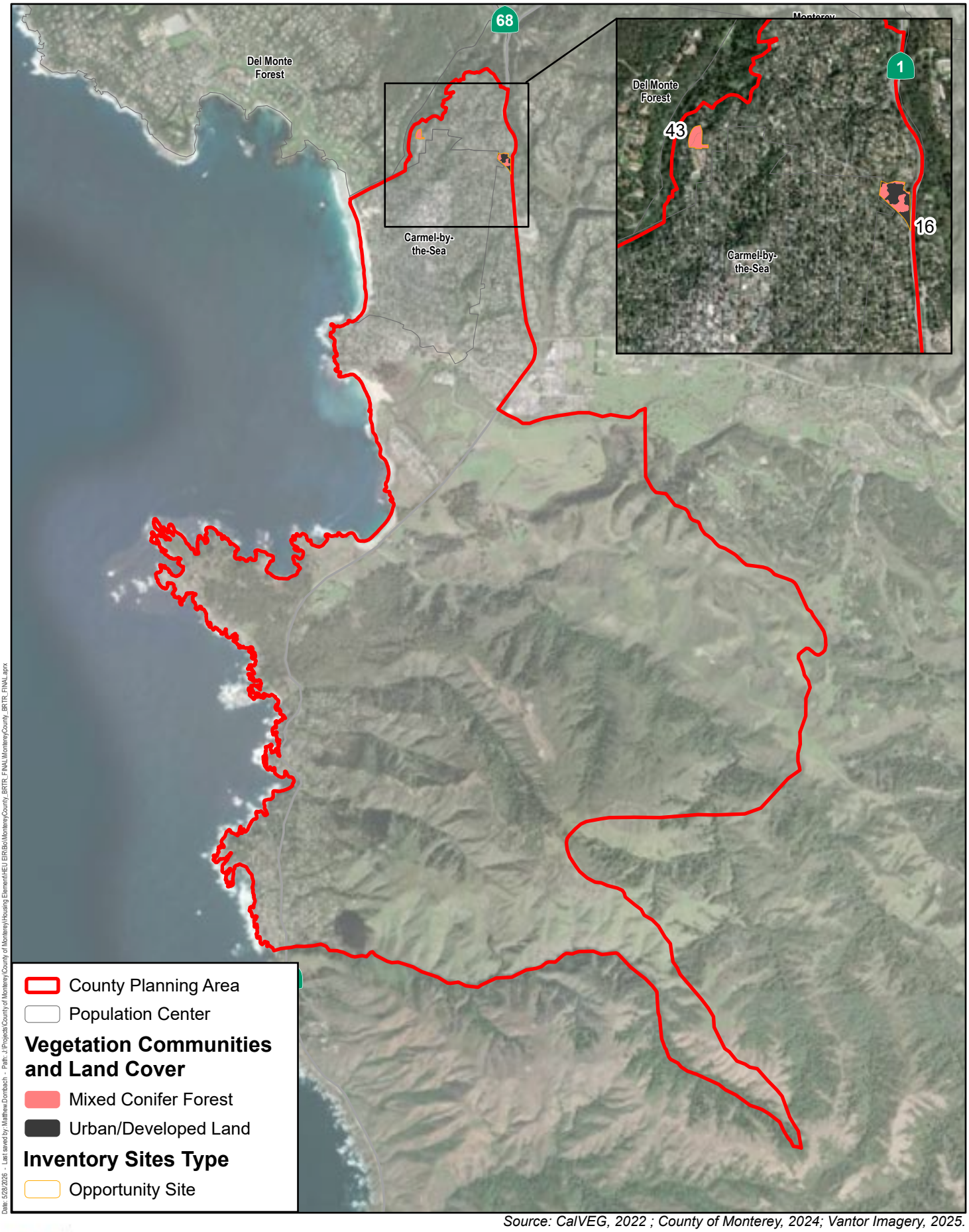

*Source: CalVEG, 2022; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

**Figure 6**

Vegetation and Land Cover - Index

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

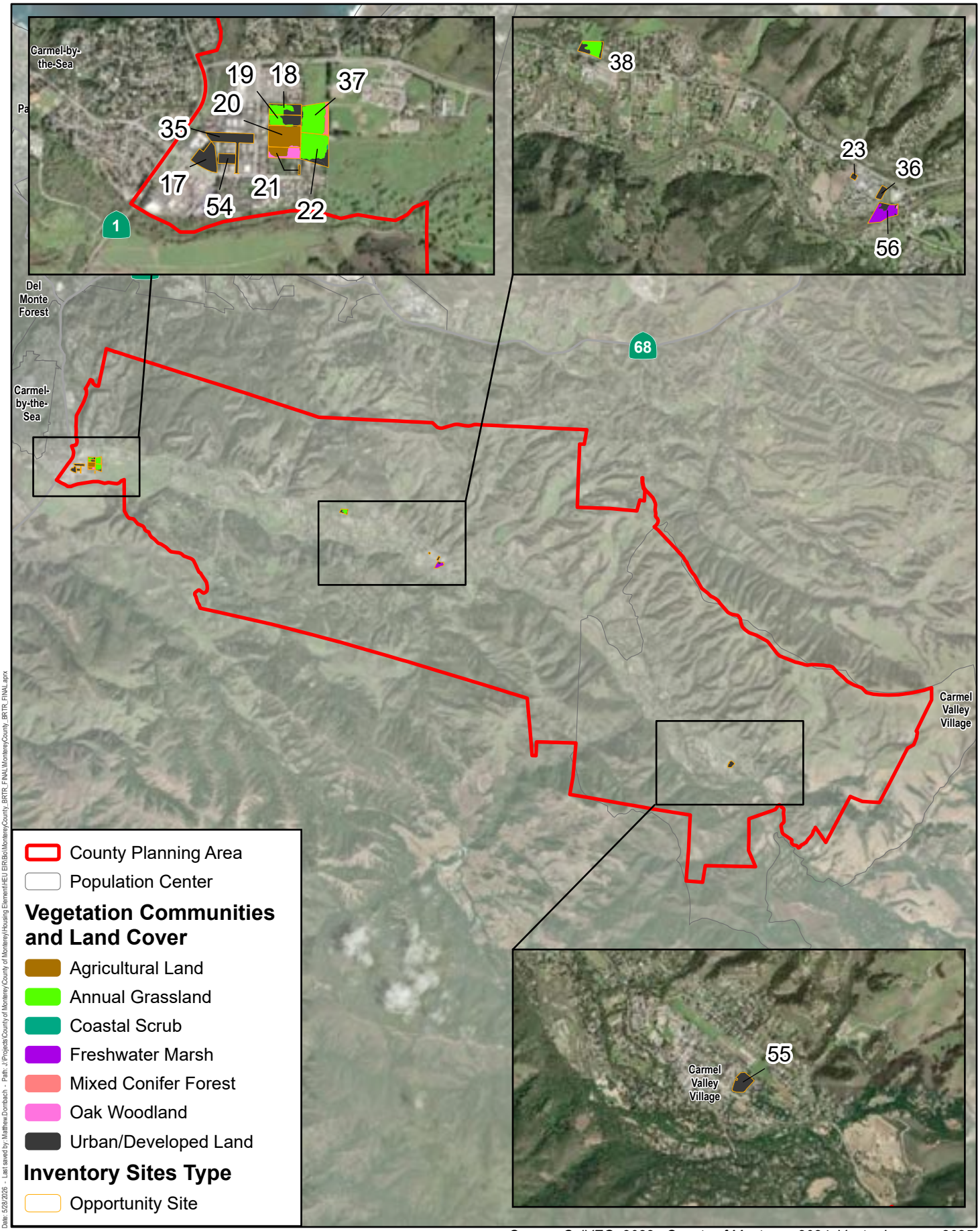
N

0 0.5 1

Miles

**Figure 6a**

Vegetation Communities and Land Cover in Carmel Area Land Use Plan




*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

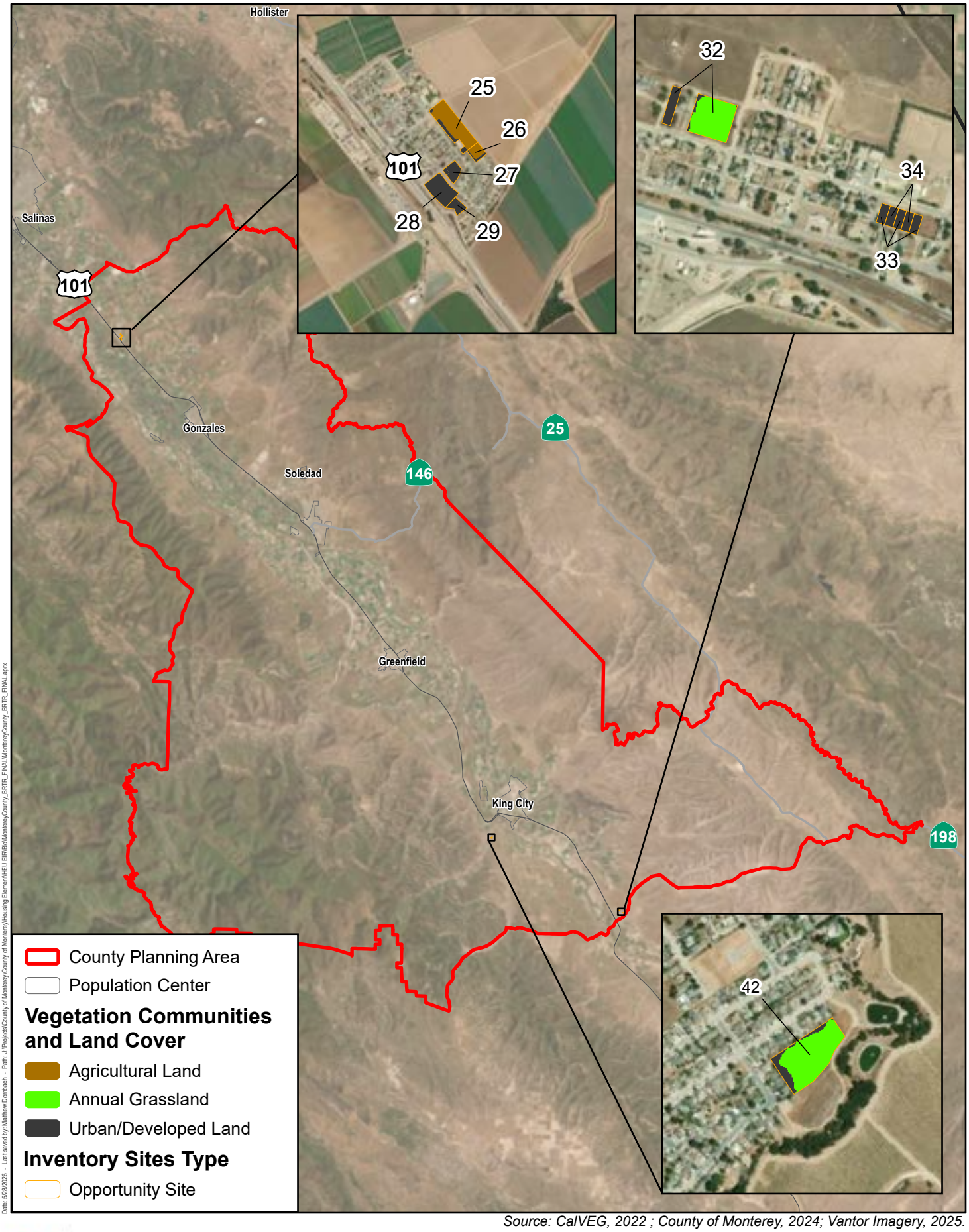
N

0 1.25 2.5

Miles

**Figure 6b**

Vegetation Communities and Land Cover in Carmel Valley Master Plan




Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

Harris & Associates

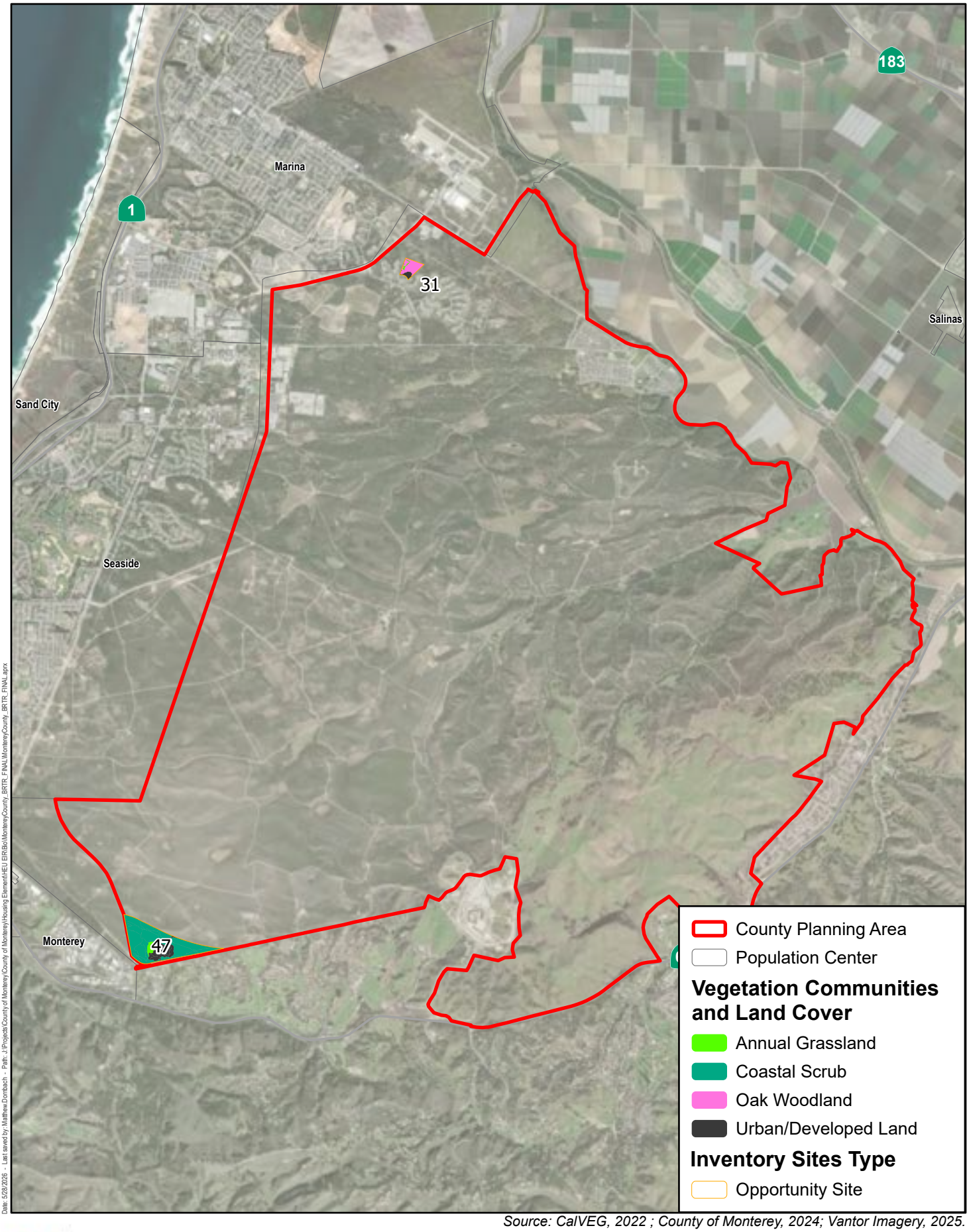
N

0 4.5 9

Miles

**Figure 6c**

Vegetation Communities and Land Cover in Central Salinas Valley Area Plan




Date: 5/28/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

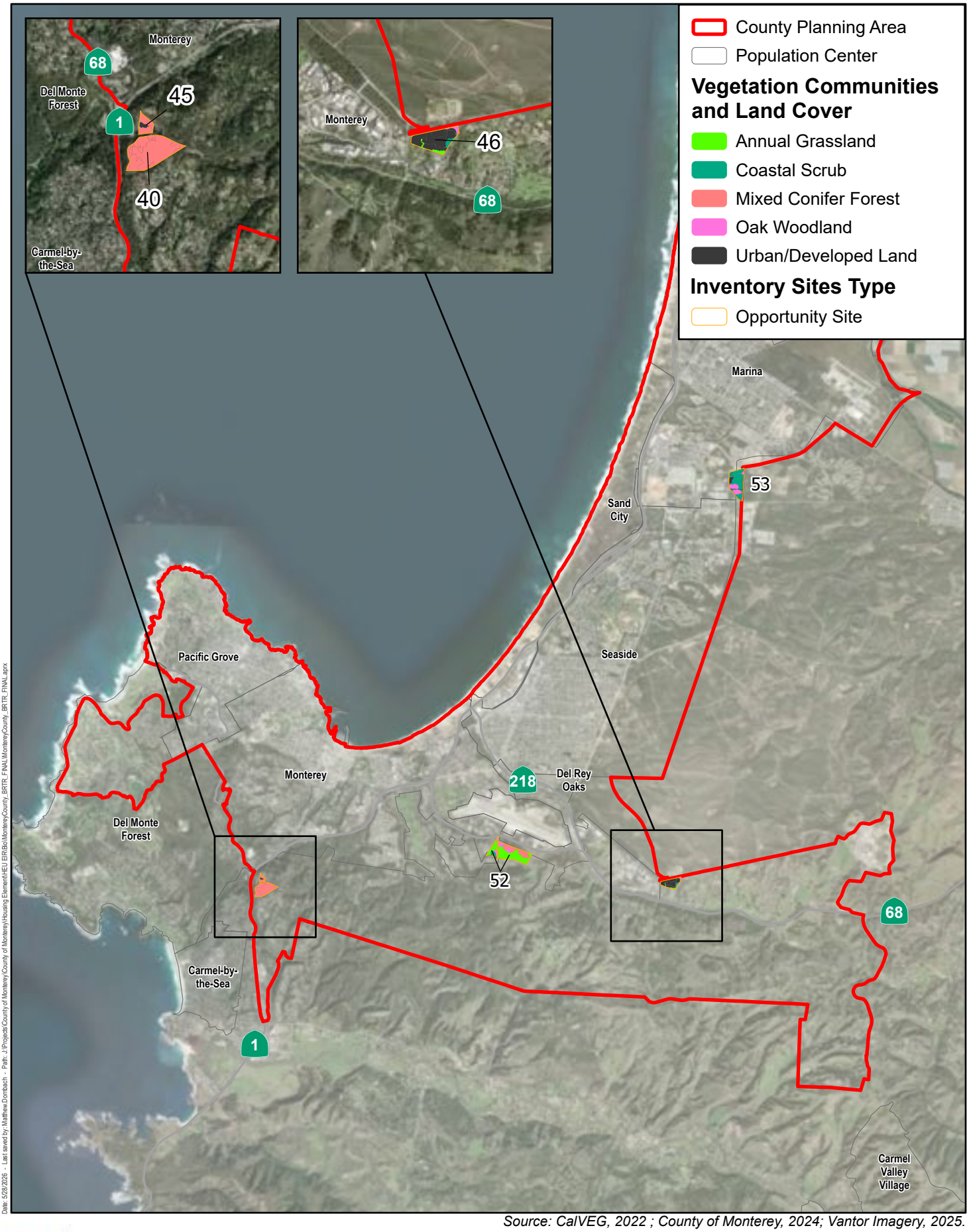
N

0 0.75 1.5

Miles

**Figure 6d**

Vegetation Communities and Land Cover in Fort Ord Master Plan




Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.

Harris & Associates

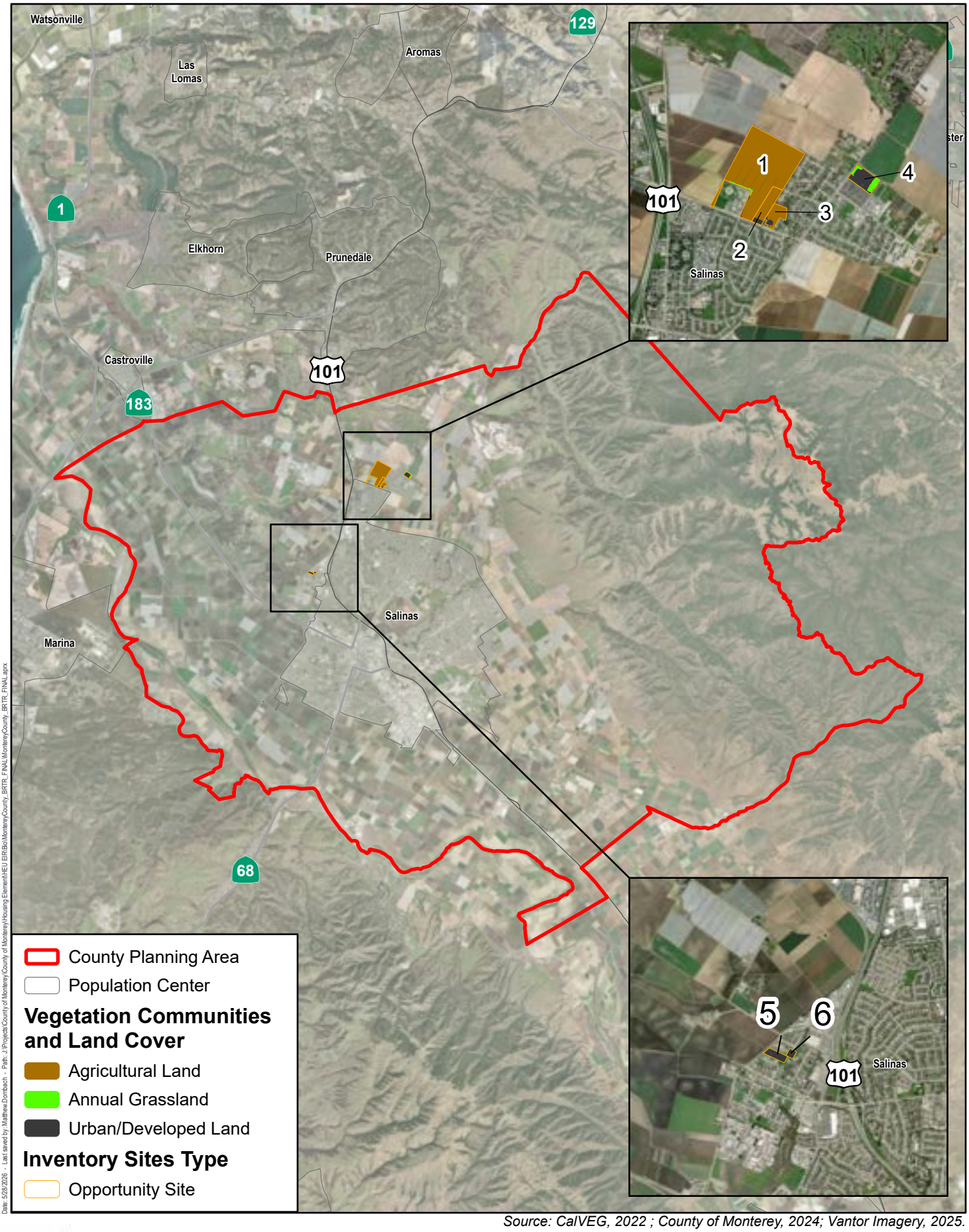
N

0 1.25 2.5

Miles

**Figure 6e**

Vegetation Communities and Land Cover in Greater Monterey Peninsula Area Plan




*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

N

0 2 4

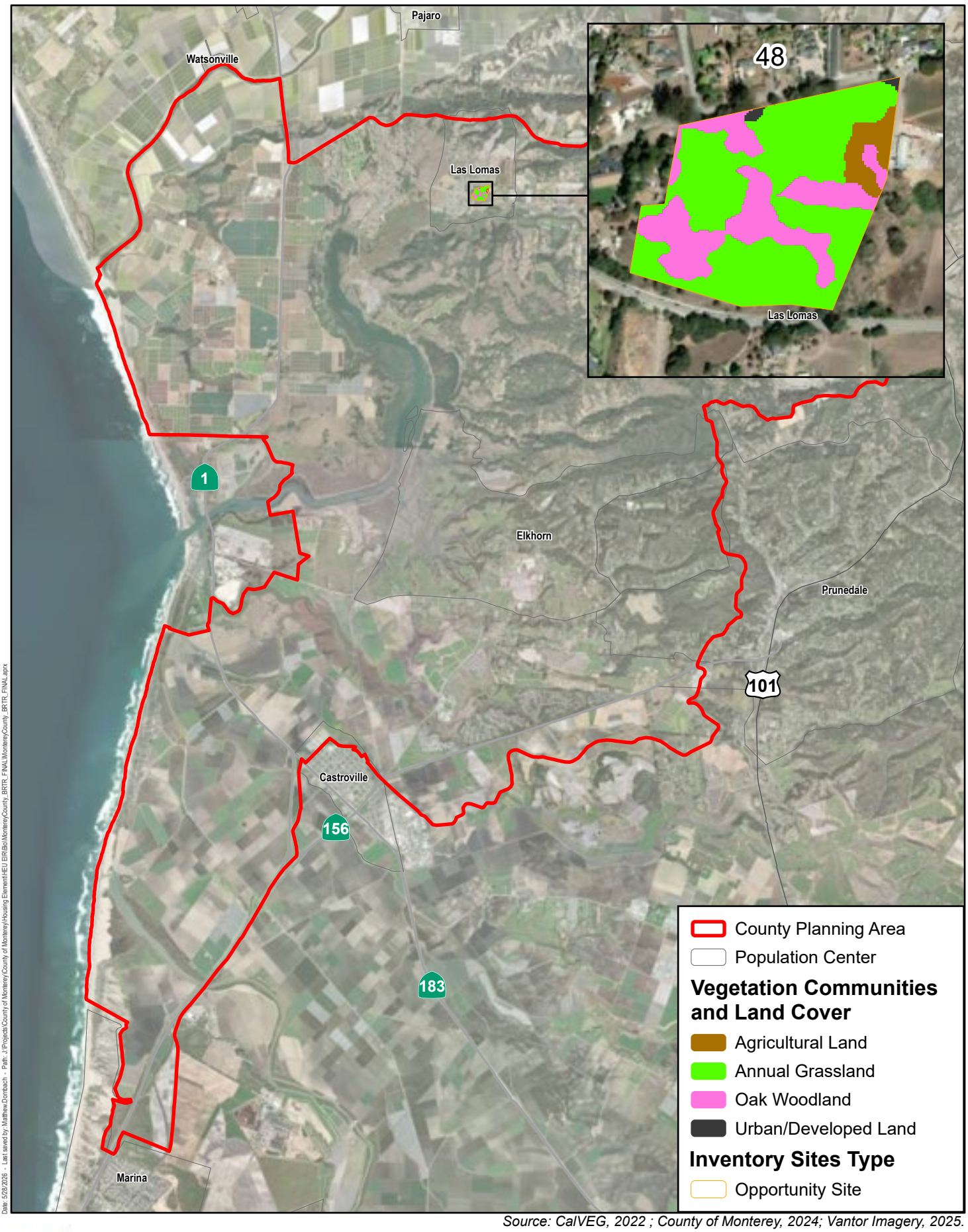
Miles

**Figure 6f**

Vegetation Communities and Land Cover in Greater Salinas Area Plan



Date: 5/28/2026 - Last saved by Matthew.Dornbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

N

0 1 2

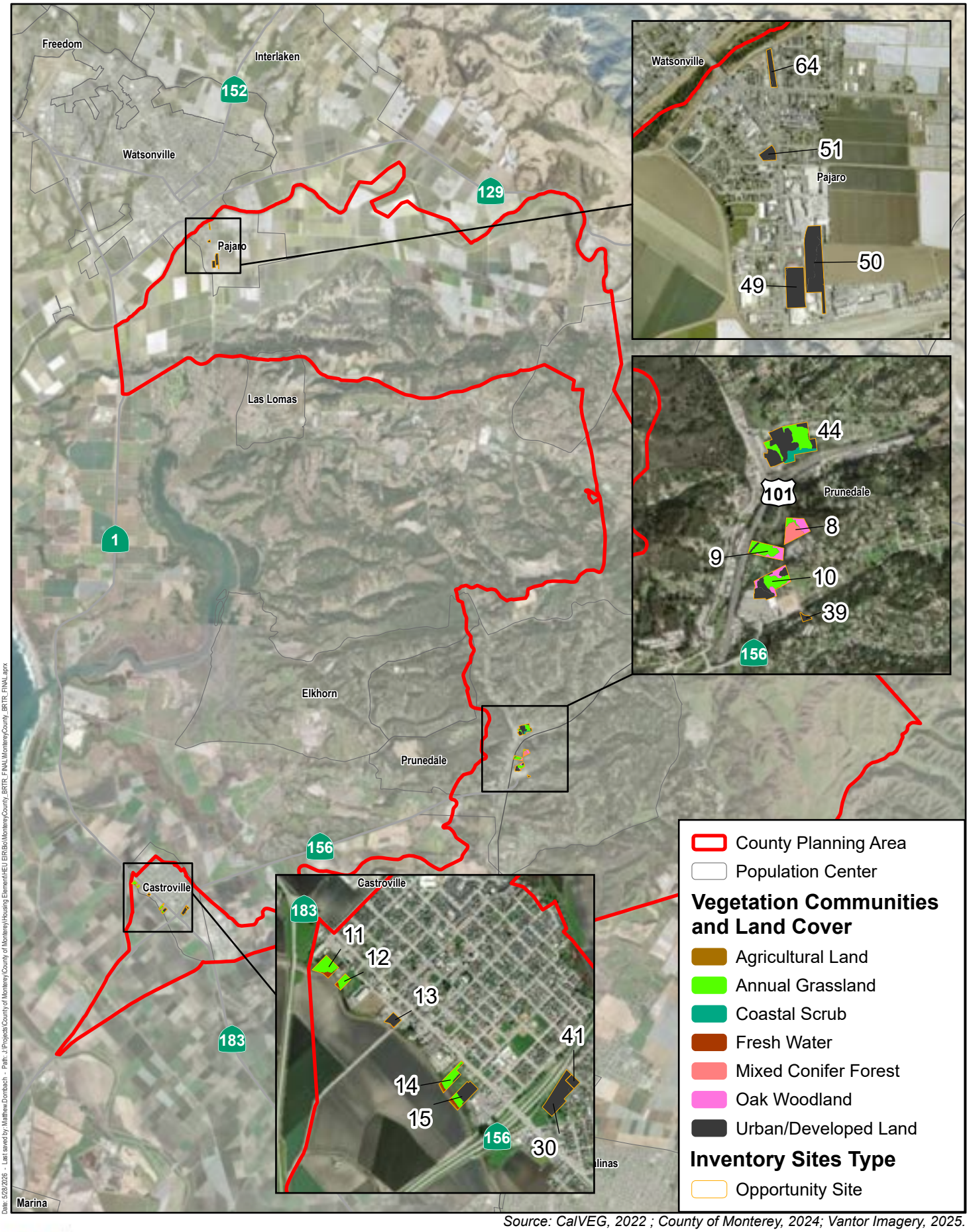
Miles

**Figure 6g**

Vegetation Communities and Land Cover in North County Land Use Plan (Coastal)



Date: 5/28/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

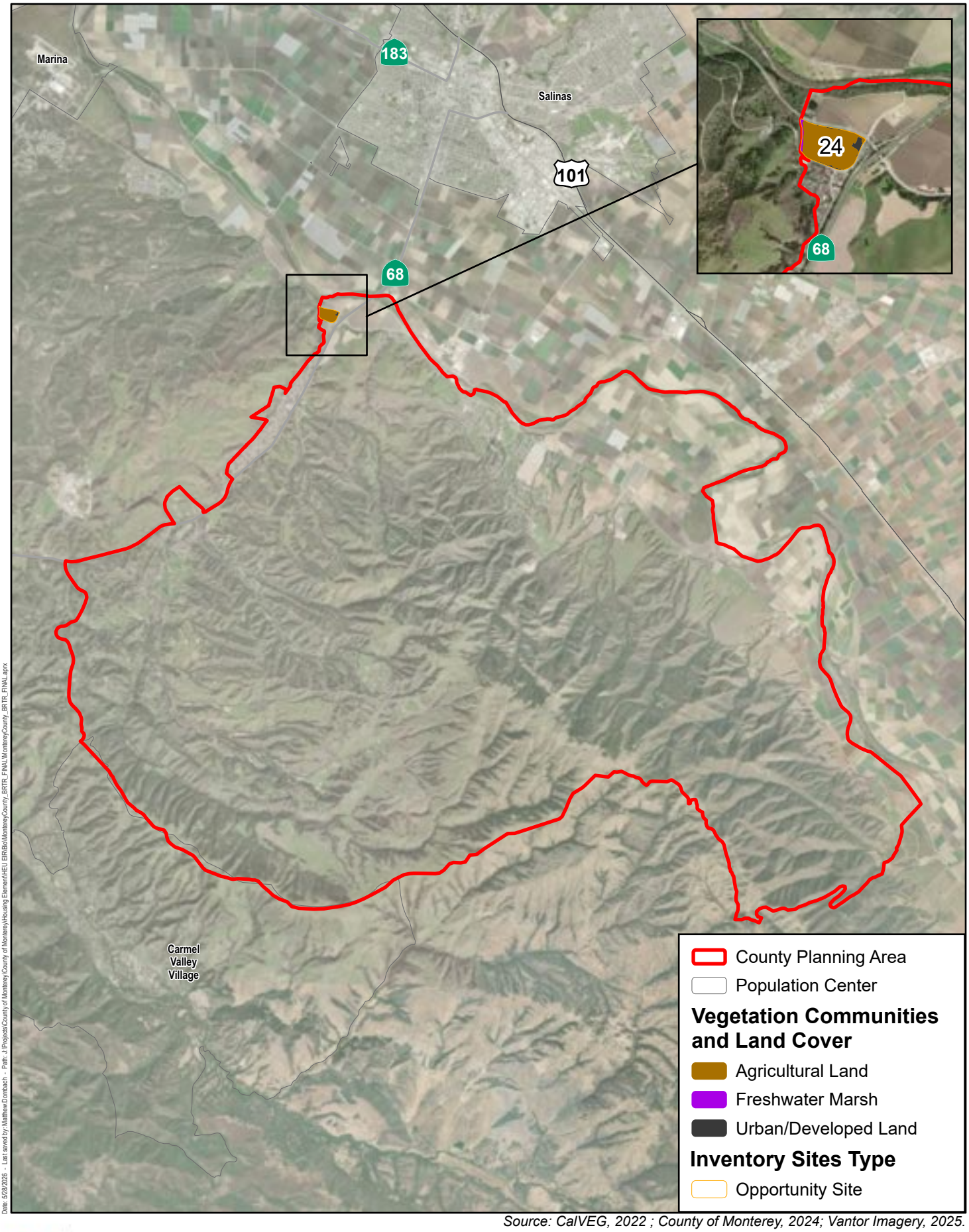
N

0 1.25 2.5

Miles

**Figure 6h**

Vegetation Communities and Land Cover in North County Area Plan (Inland)




Date: 5/28/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: CalVEG, 2022 ; County of Monterey, 2024; Vantor Imagery, 2025.*

Harris & Associates

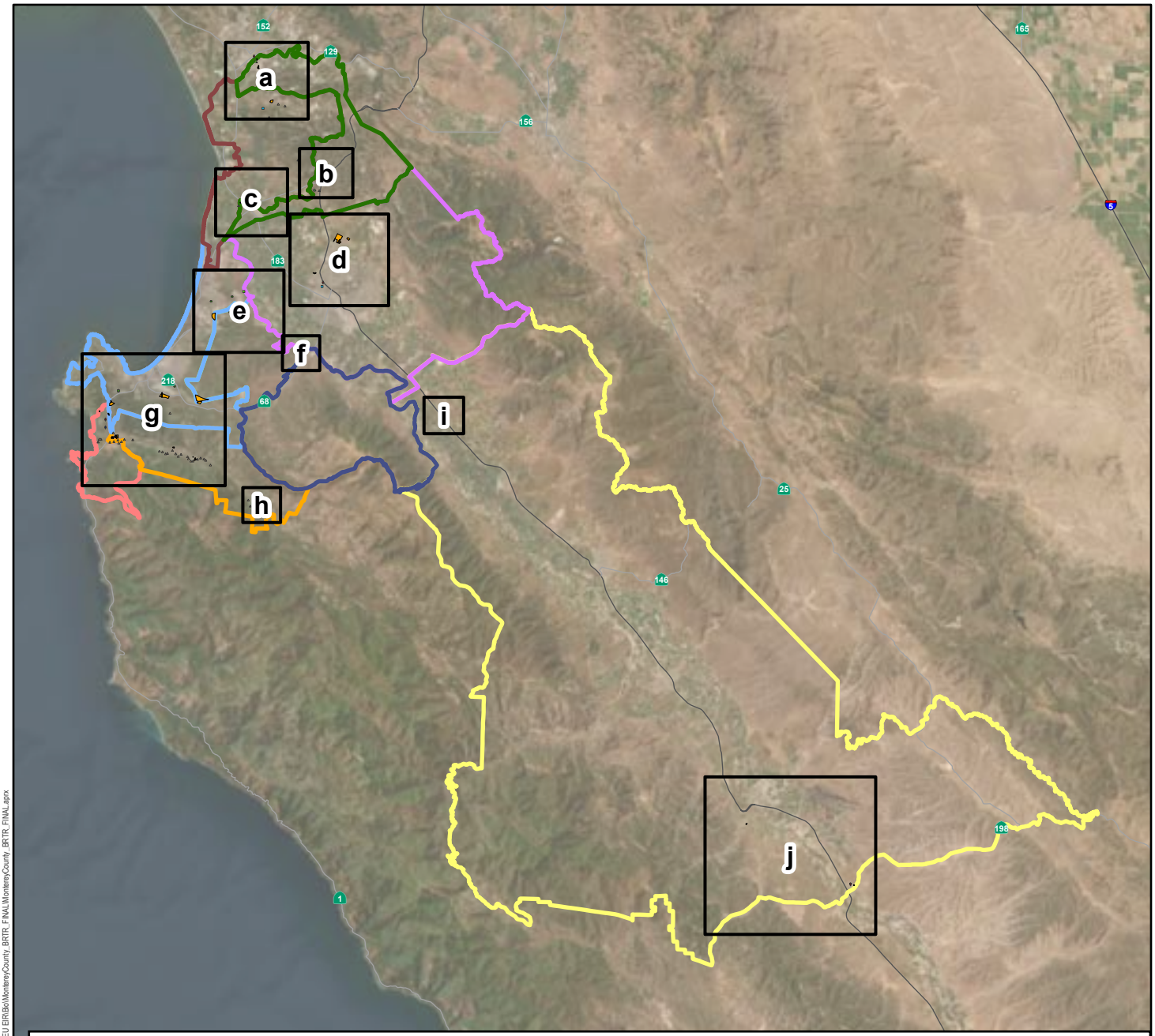
N

0 1.25 2.5

Miles

**Figure 6i**

Vegetation Communities and Land Cover in Toro Area Plan




*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

N

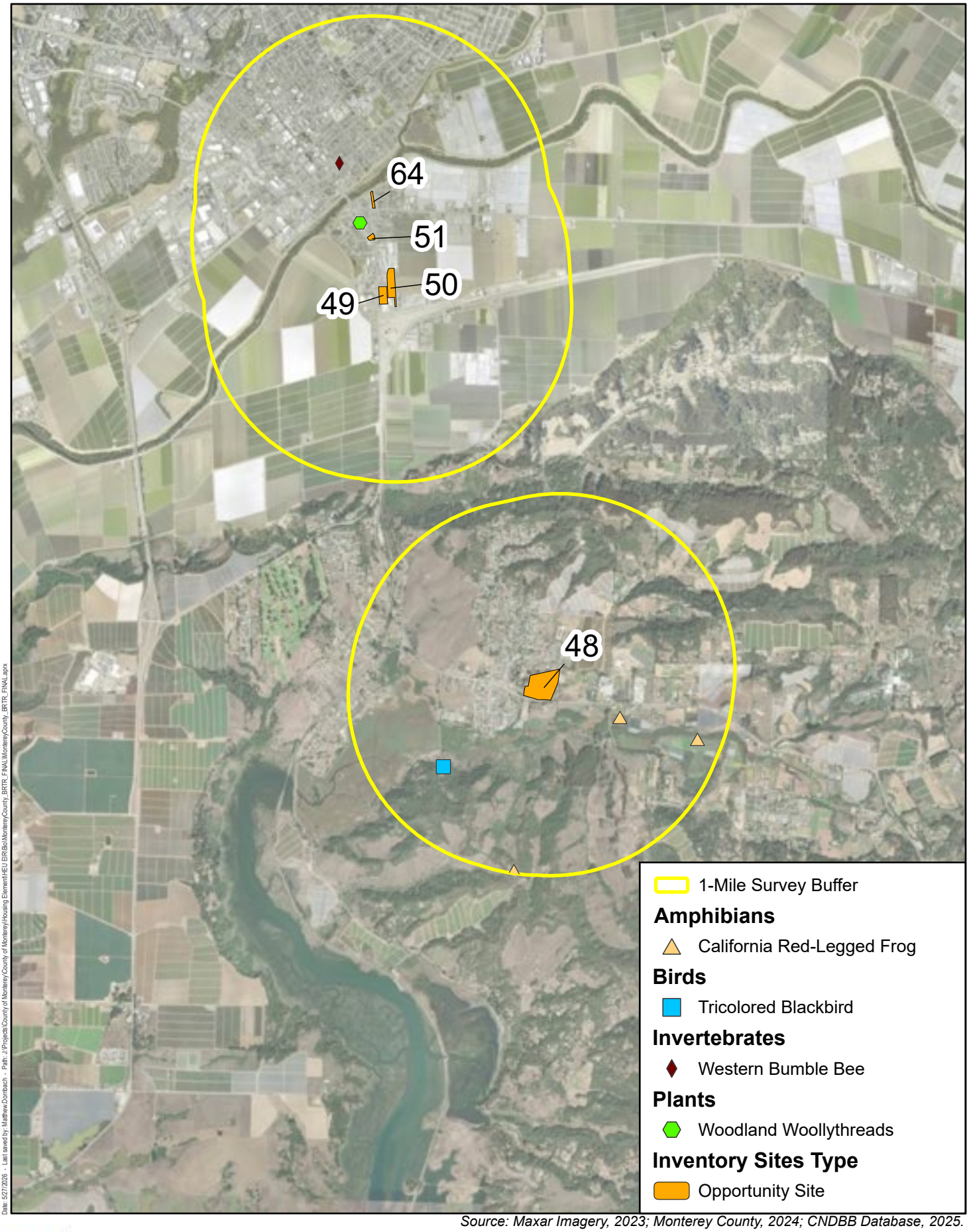
0 5 10

Miles

**Figure 7**

Historical Species with Potential to Occur - Index

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

N

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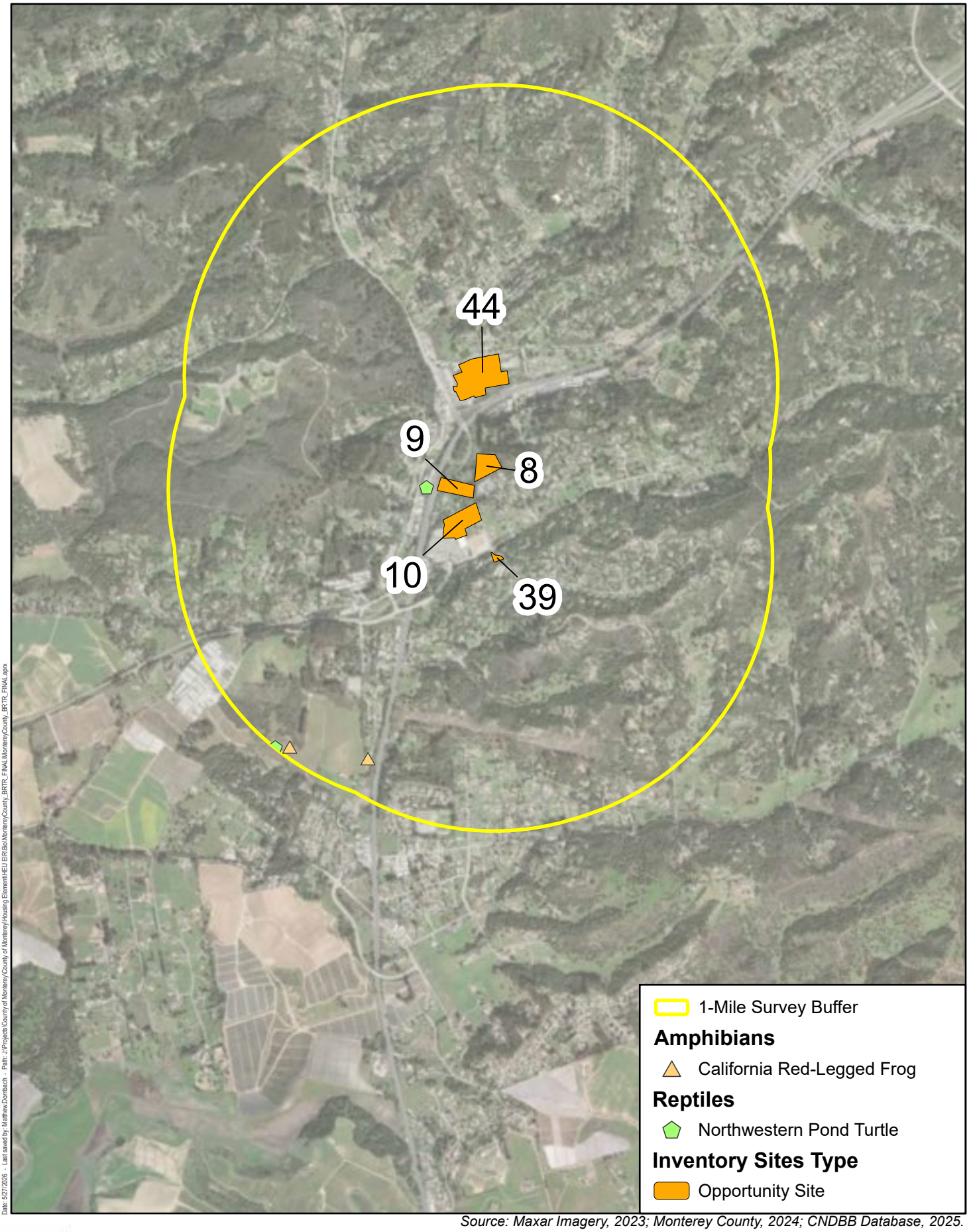
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**Figure 7a**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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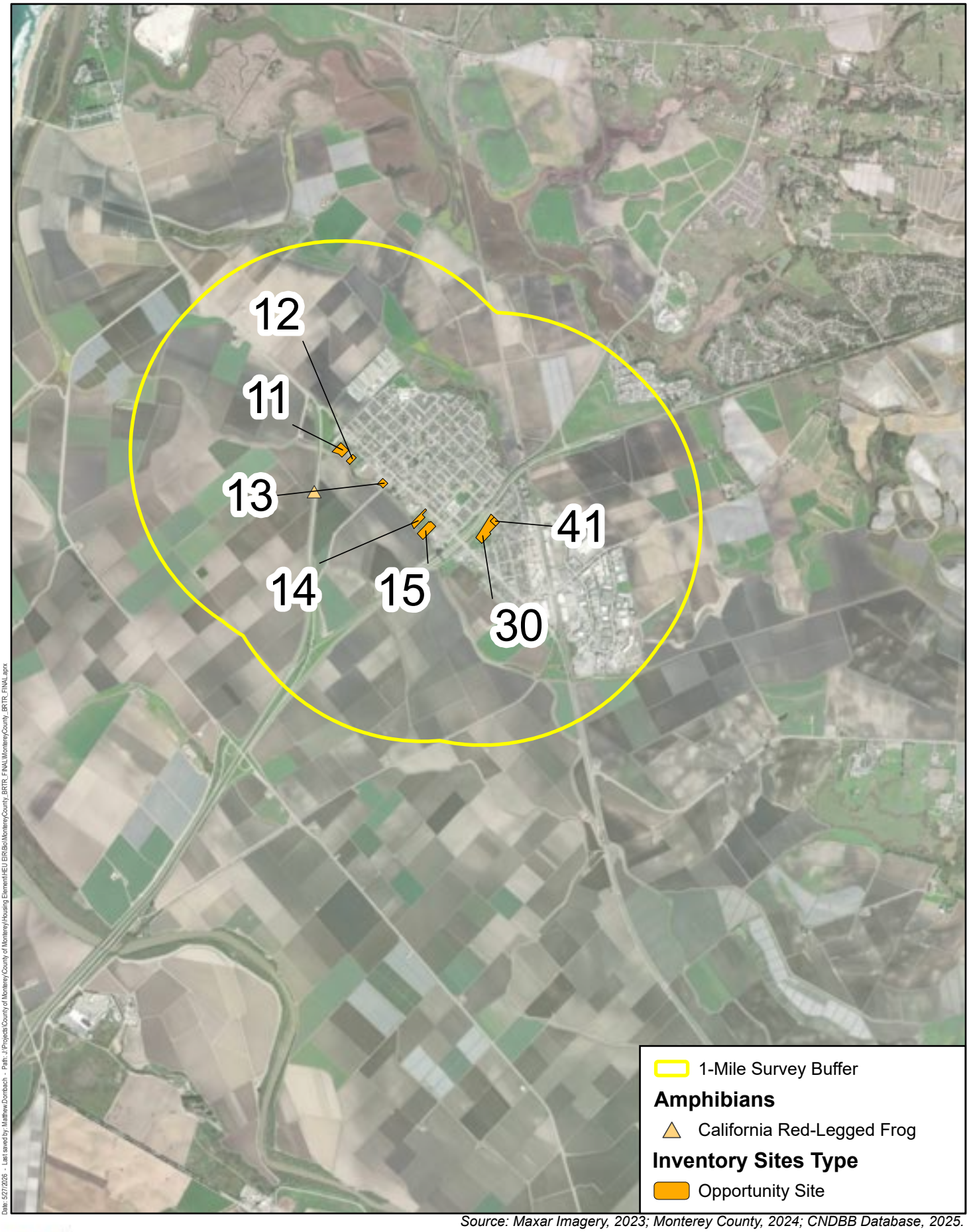
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**Figure 7b**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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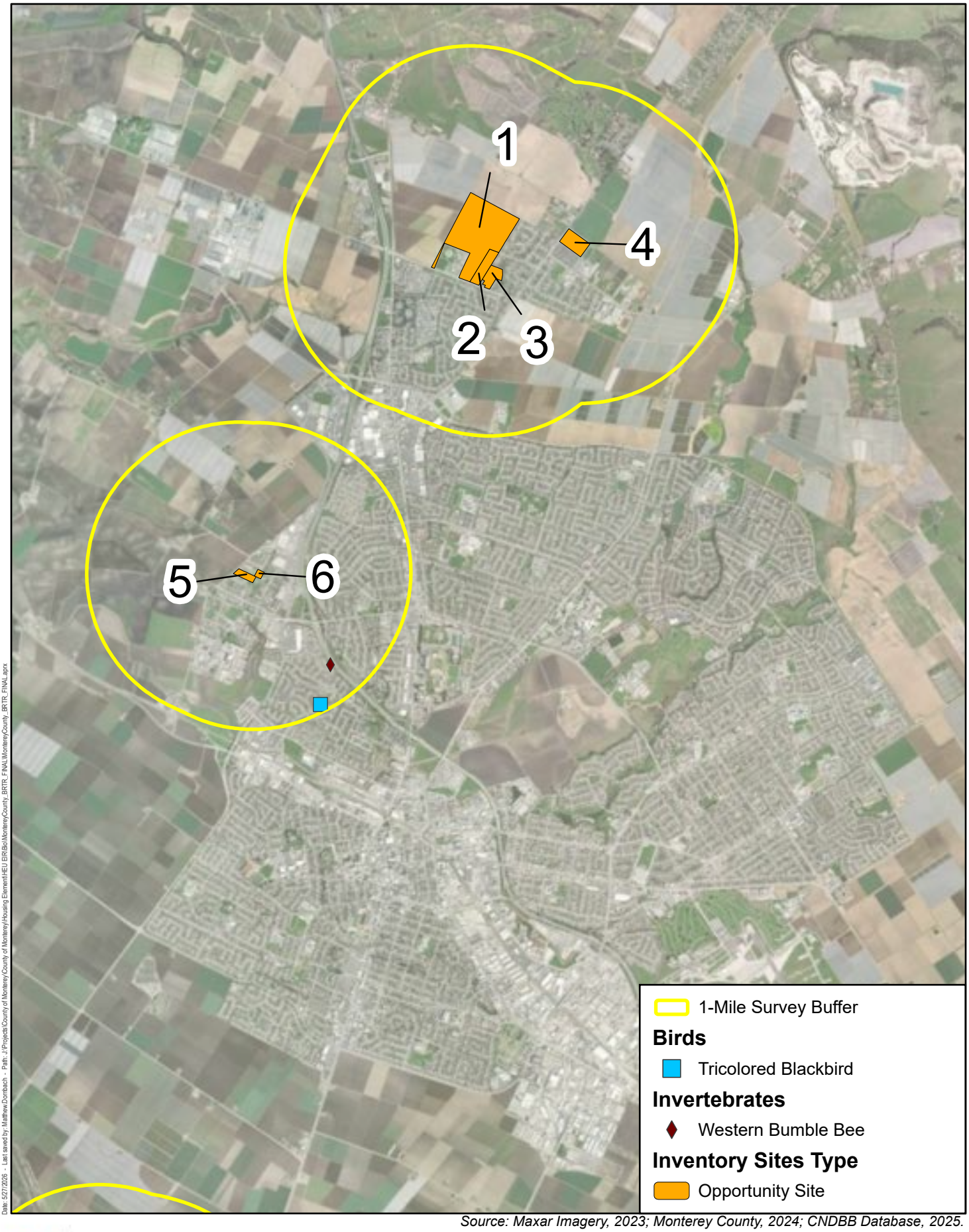
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**Figure 7c**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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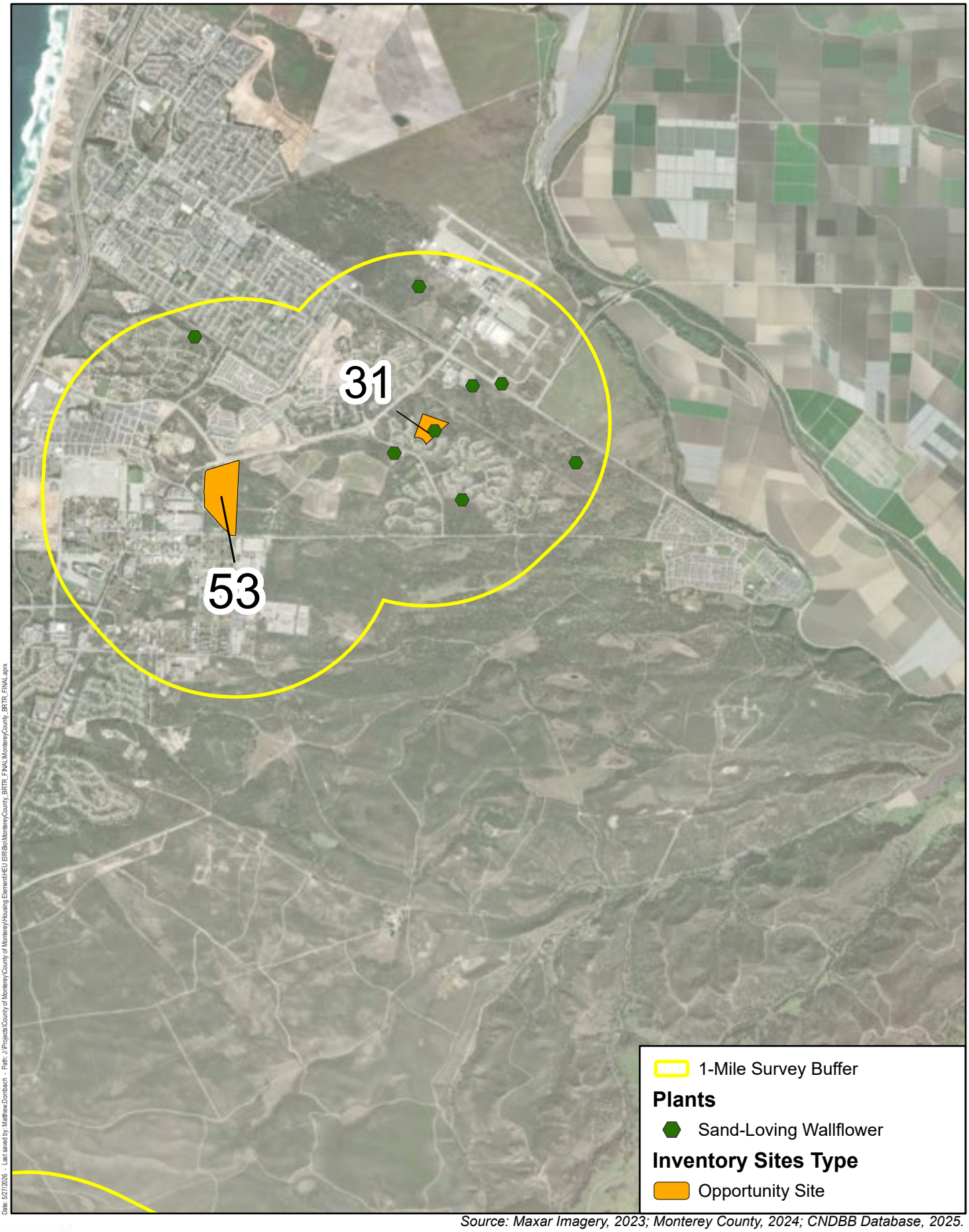
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**Figure 7d**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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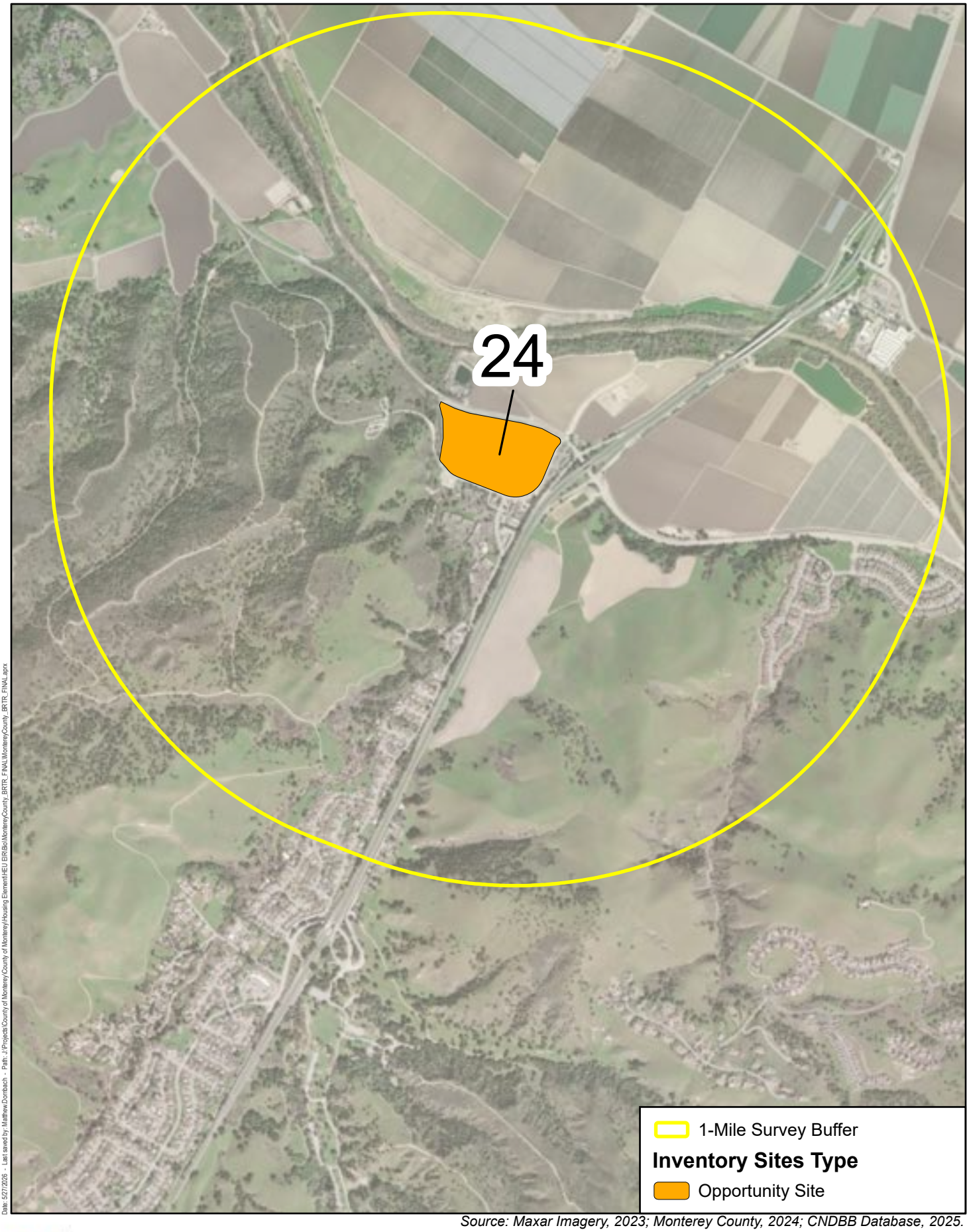
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**Figure 7e**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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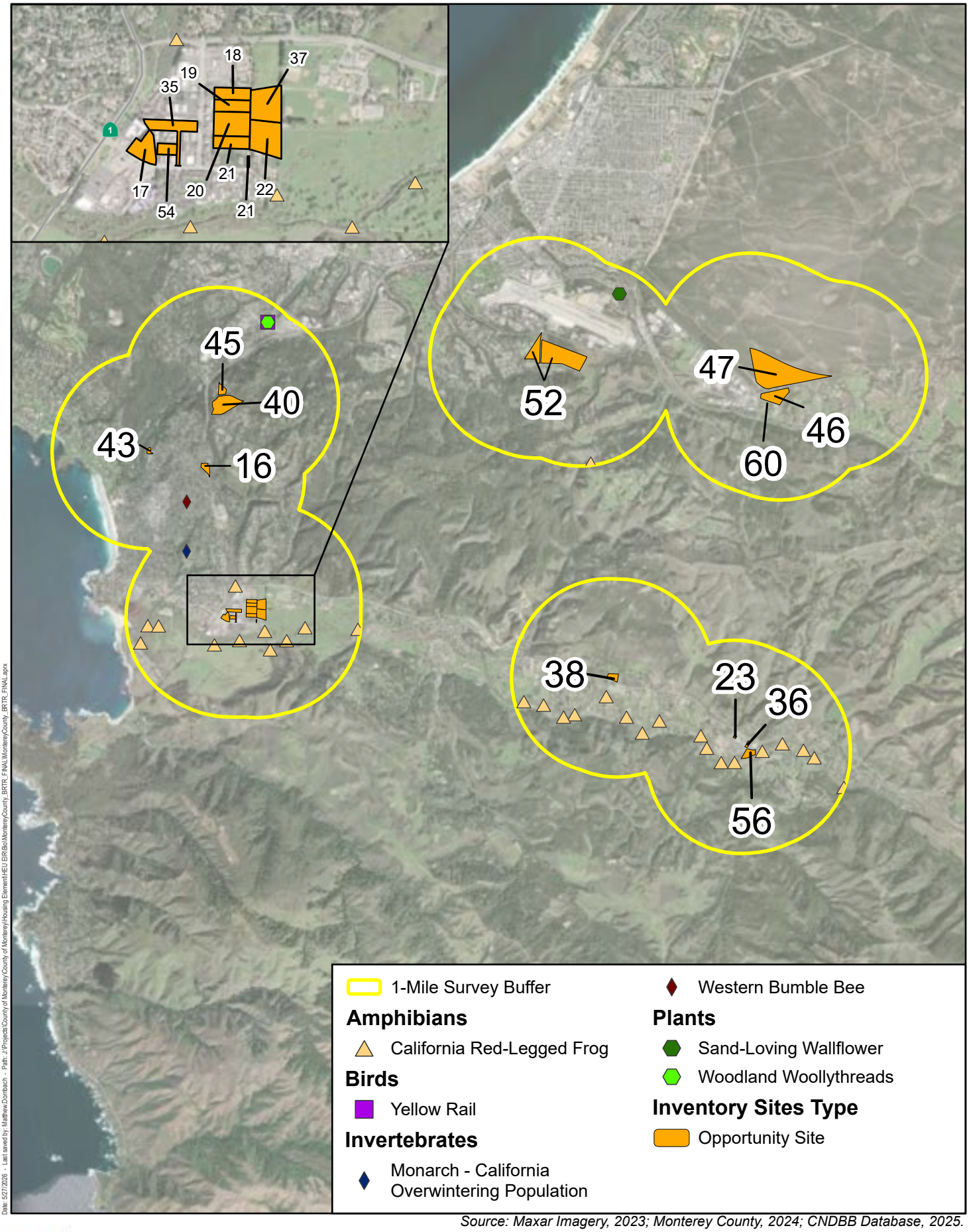
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**Figure 7f**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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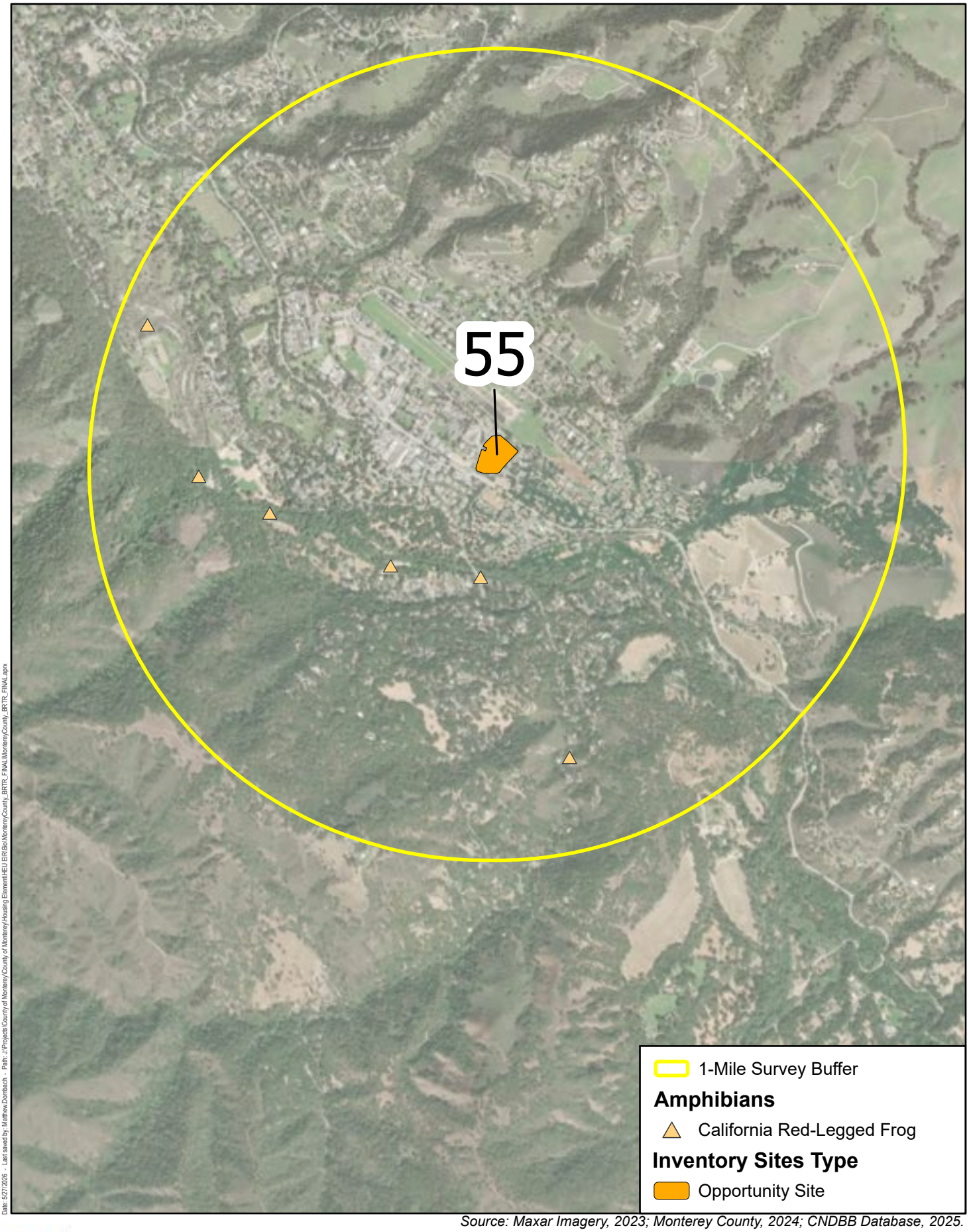
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**Figure 7g**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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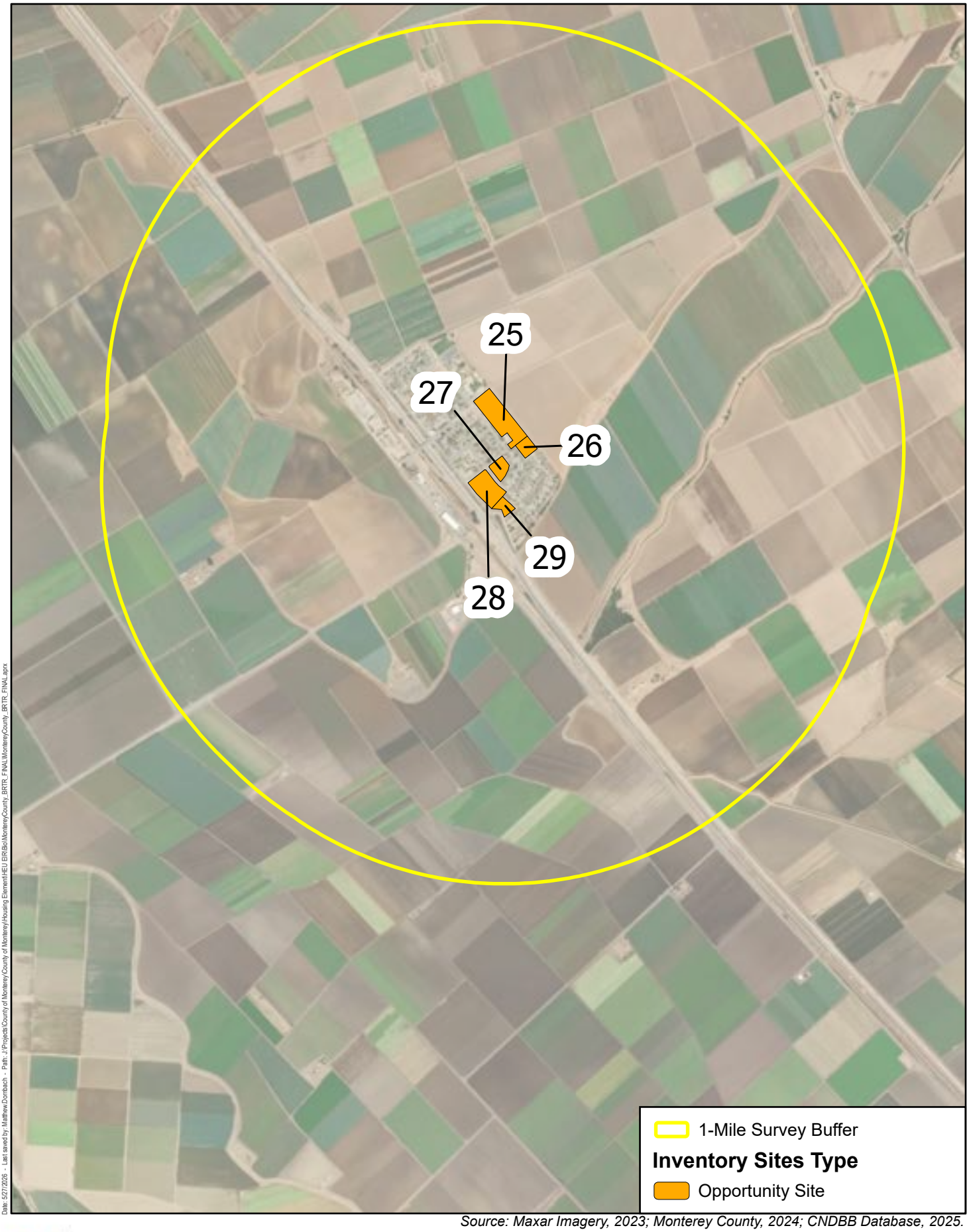
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**Figure 7h**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

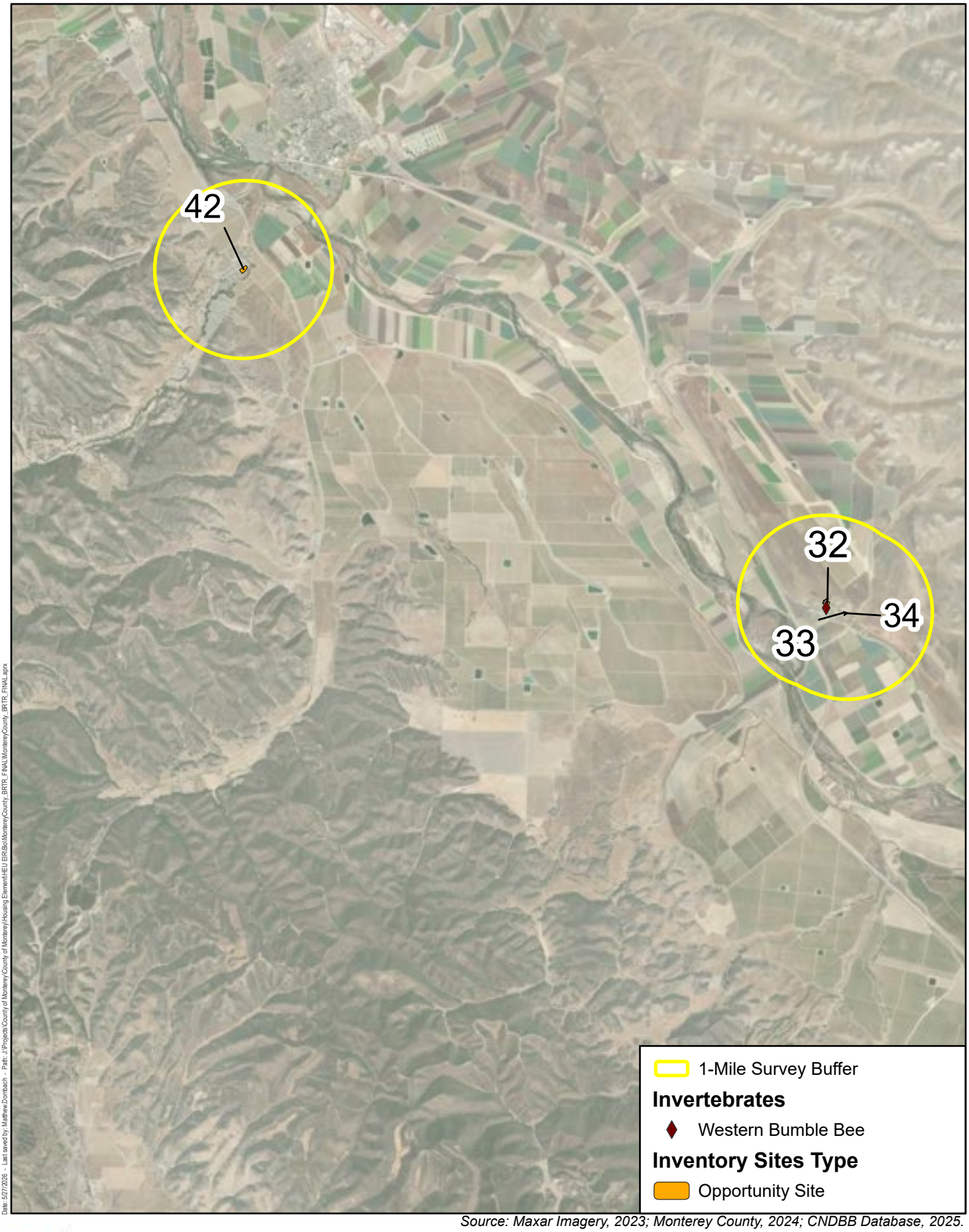
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0 850 1,700

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**Figure 7i**

Historical Species with Potential to Occur




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*Source: Maxar Imagery, 2023; Monterey County, 2024; CNDBB Database, 2025.*

Harris & Associates

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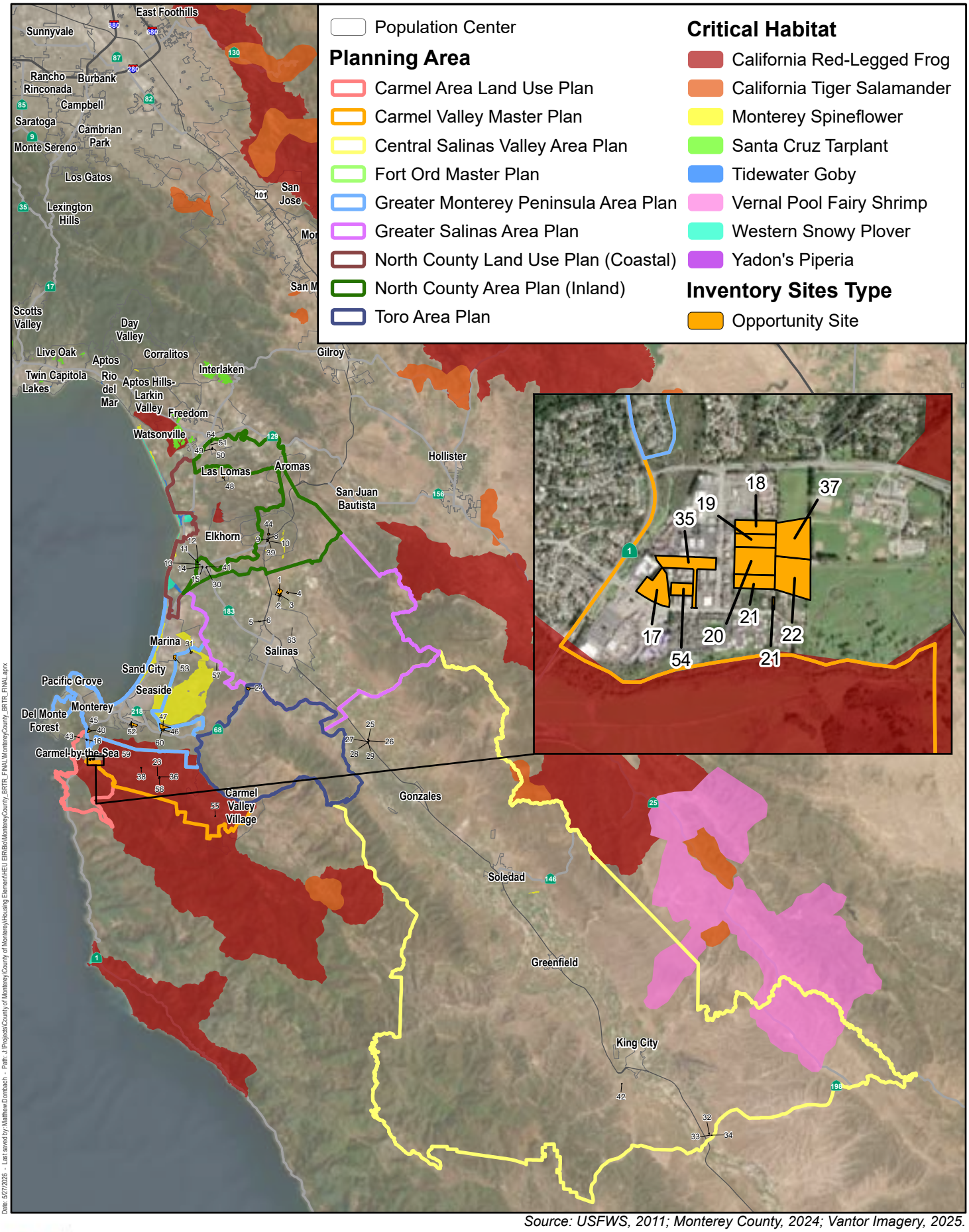
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**Figure 7j**

Historical Species with Potential to Occur

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

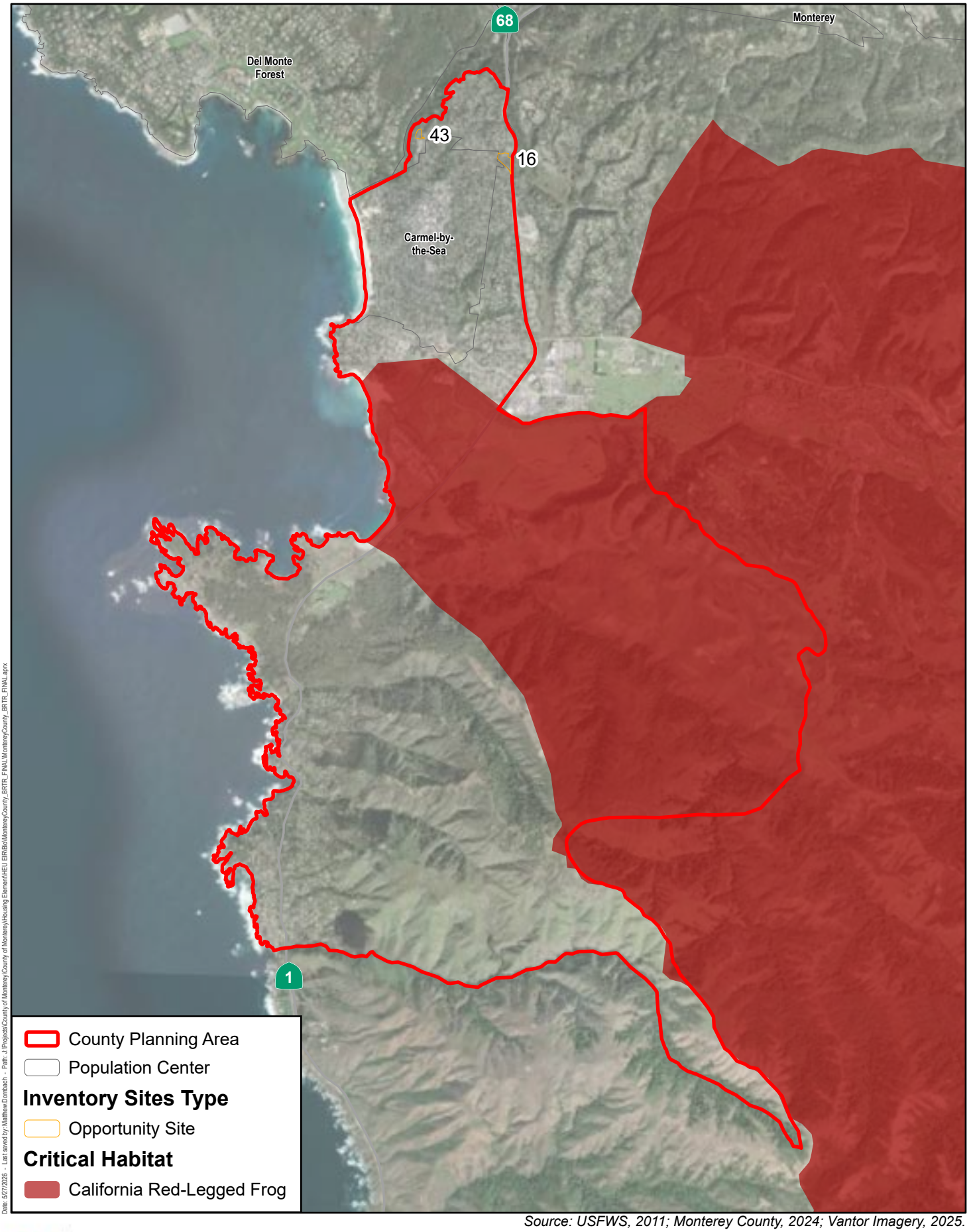
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0 5 10

Miles

**Figure 8**

Critical Habitat - Index




Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.

Harris & Associates

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0 0.5 1

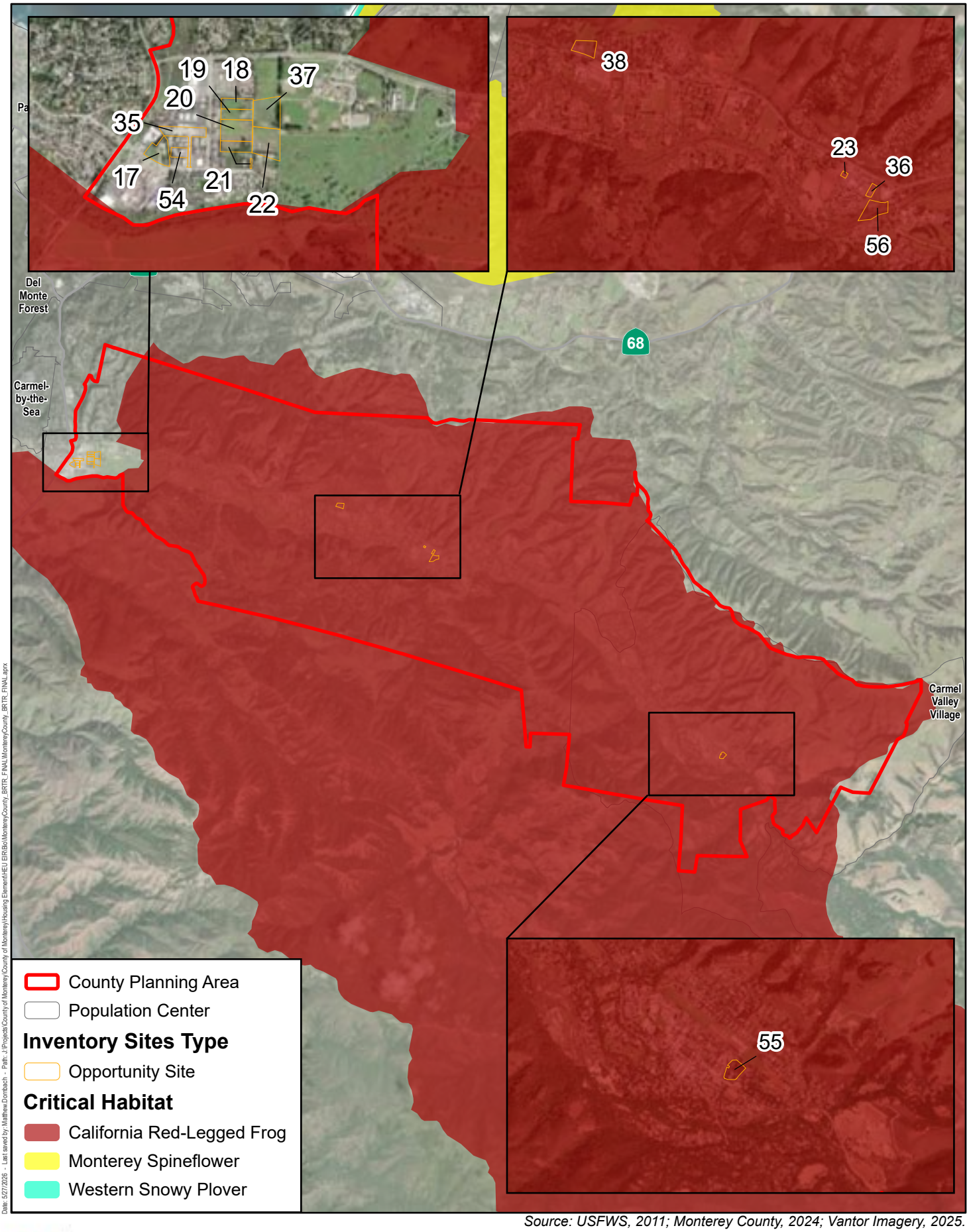
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**Figure 8a**

Critical Habitat in Carmel Area Land Use Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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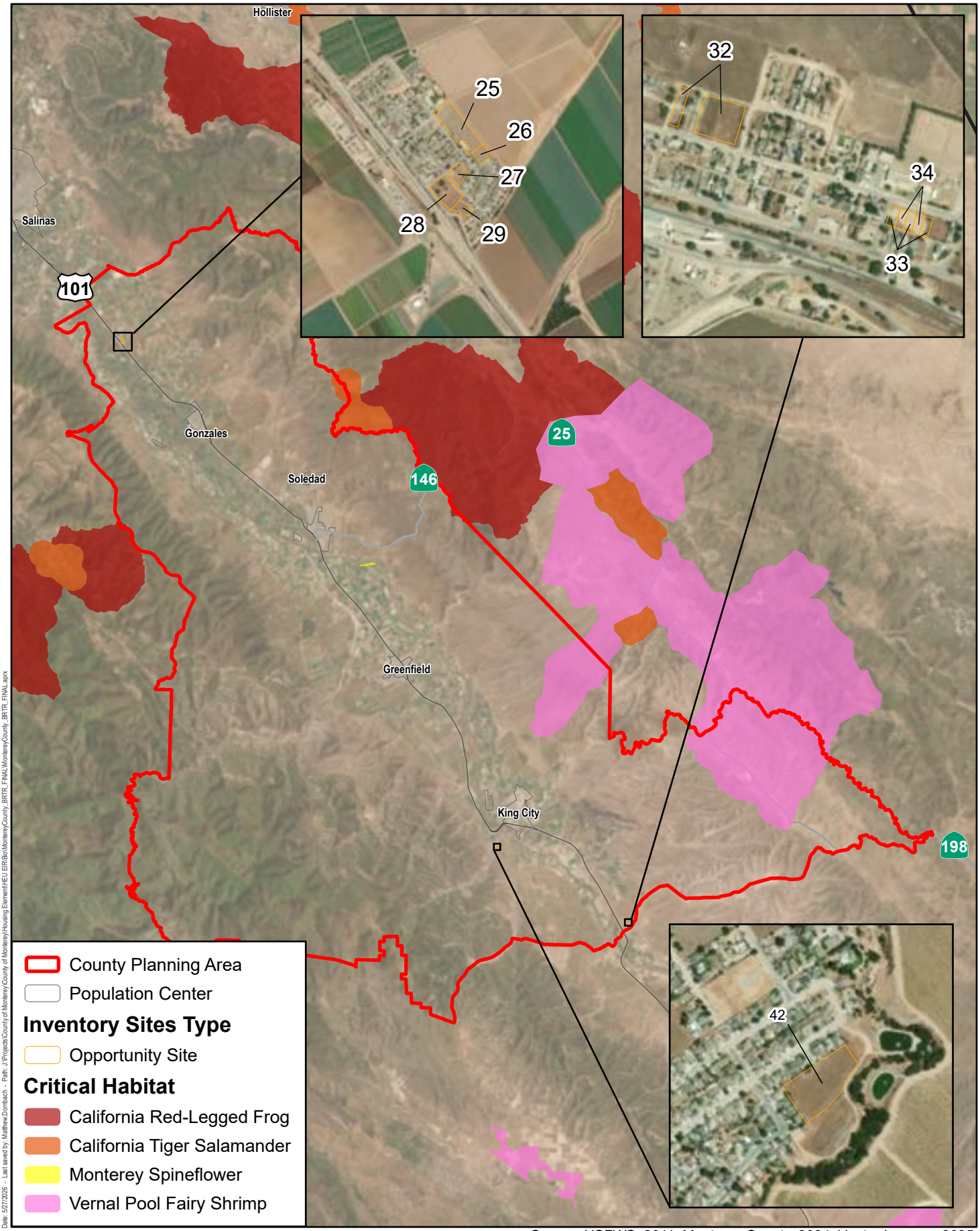
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Miles

**Figure 8b**

Critical Habitat in Carmel Valley Master Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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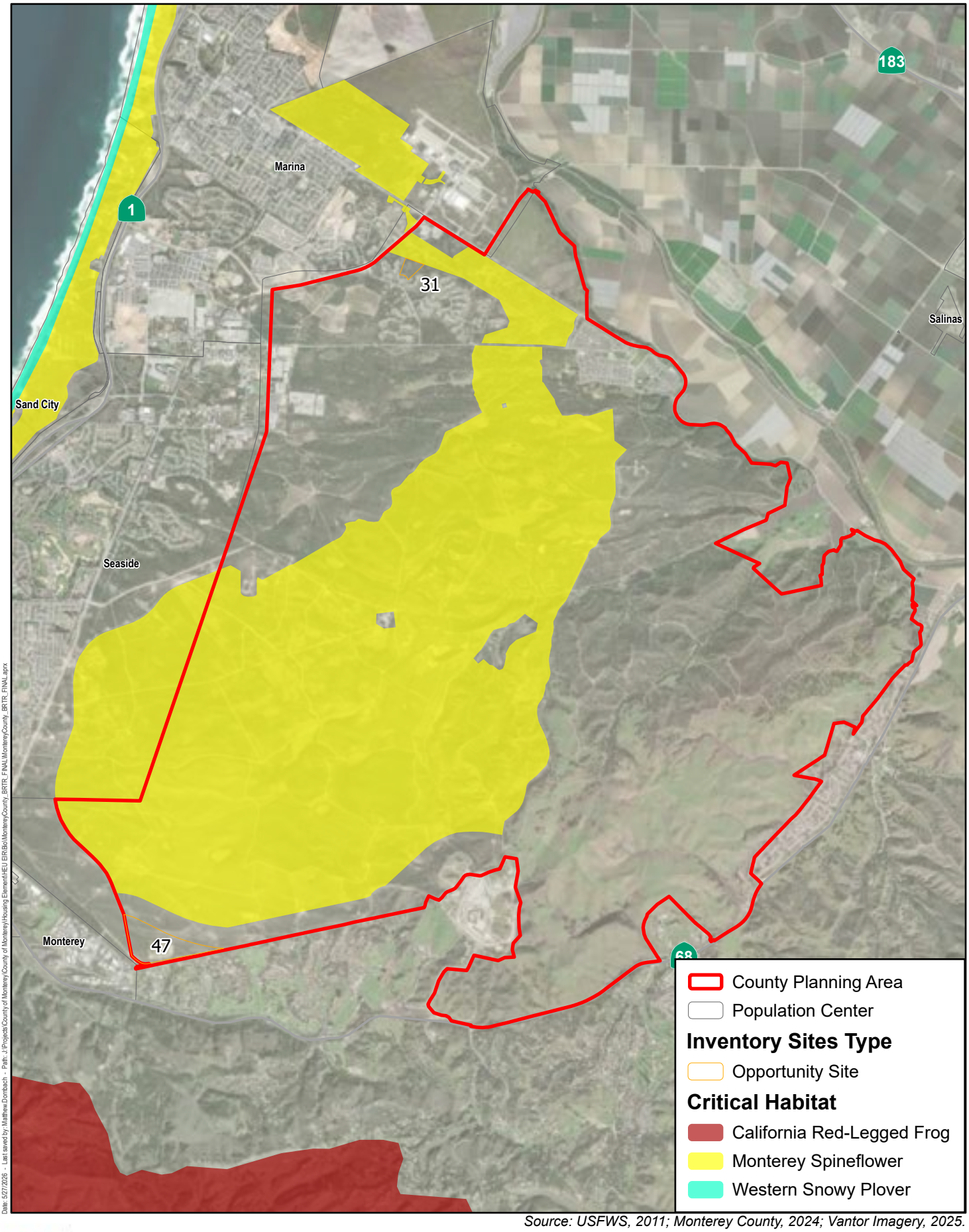
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**Figure 8c**

Critical Habitat in Central Salinas Valley Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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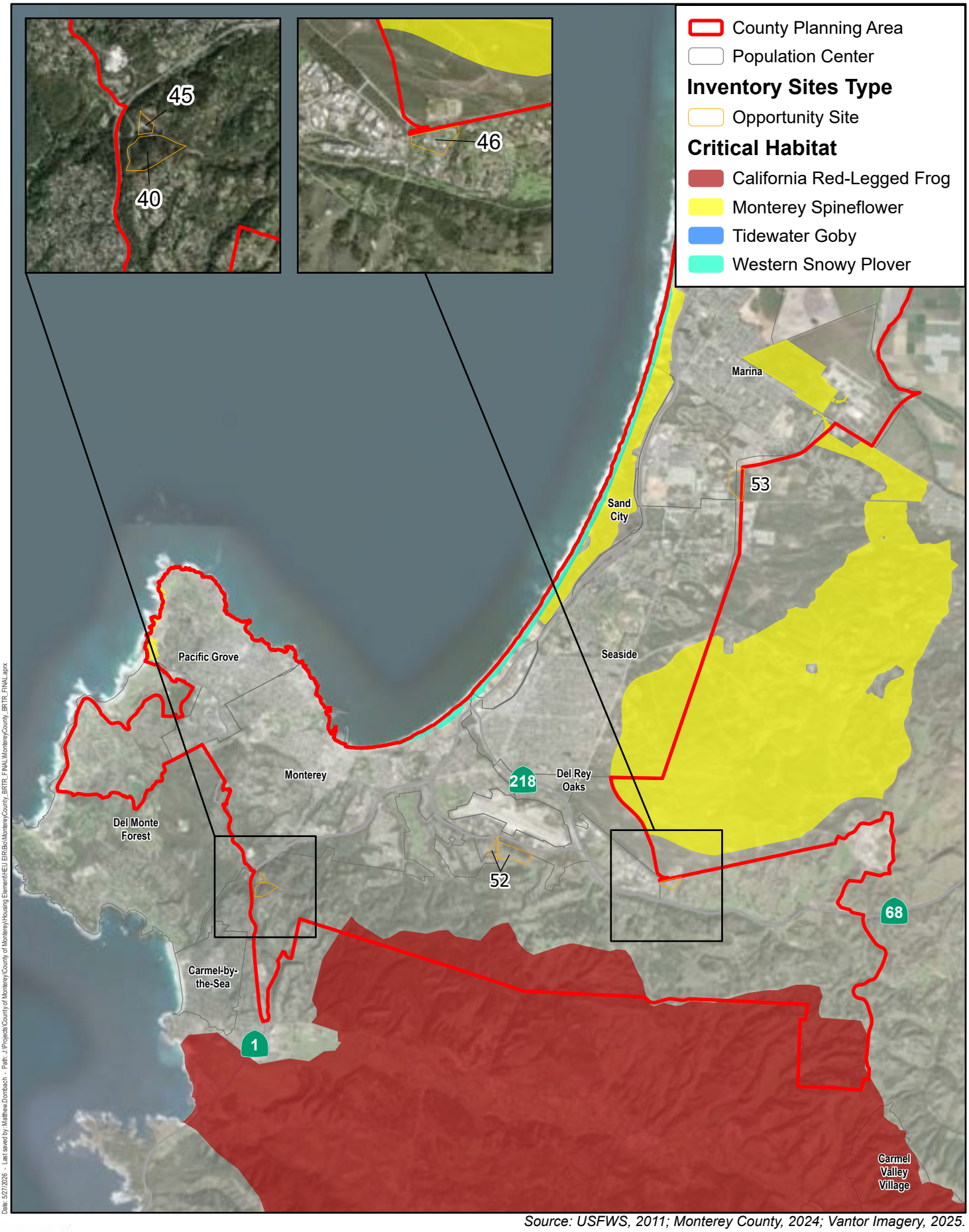
0 0.75 1.5

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**Figure 8d**

Critical Habitat in Fort Ord Master Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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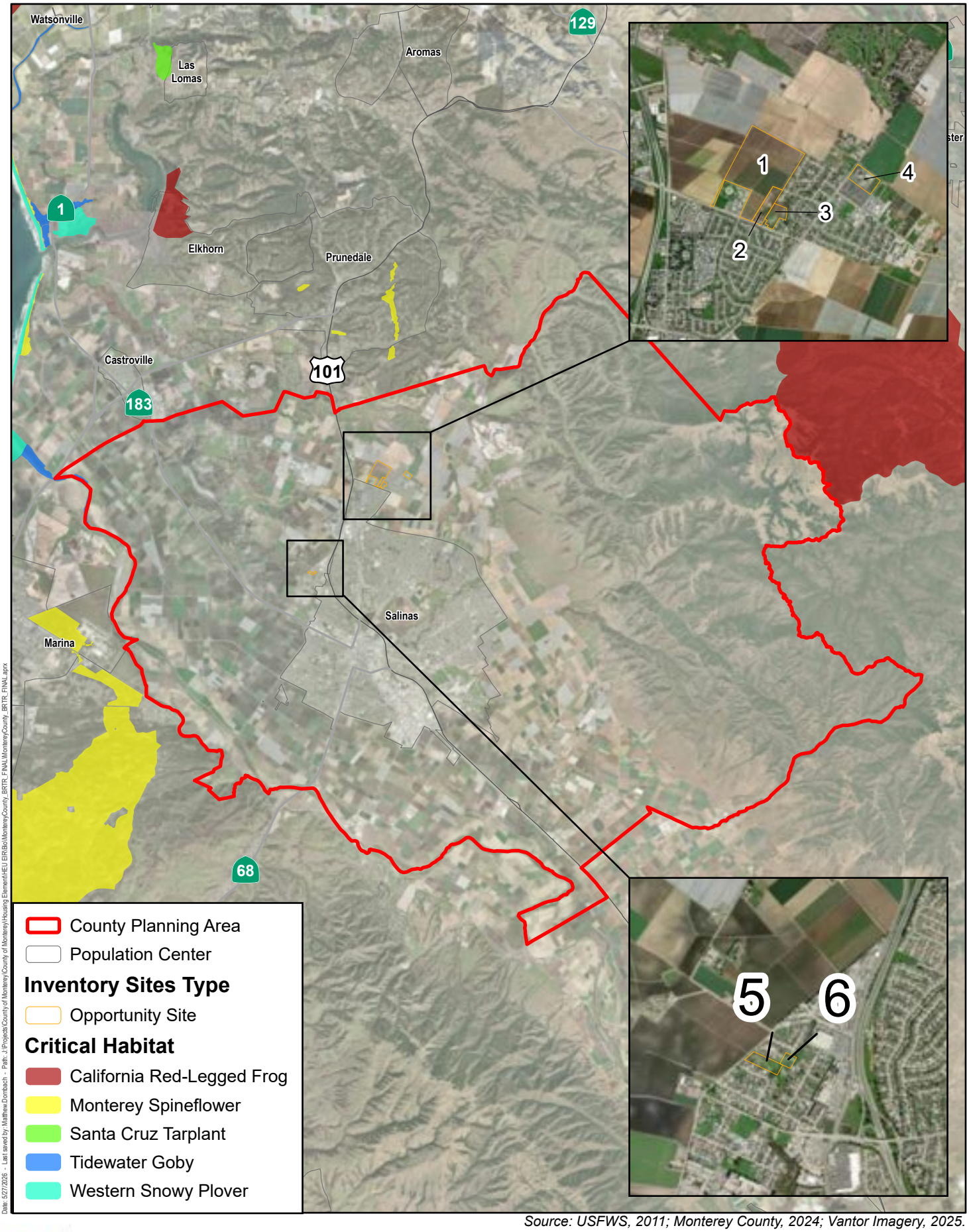
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Miles

**Figure 8e**

Critical Habitat in Greater Monterey Peninsula Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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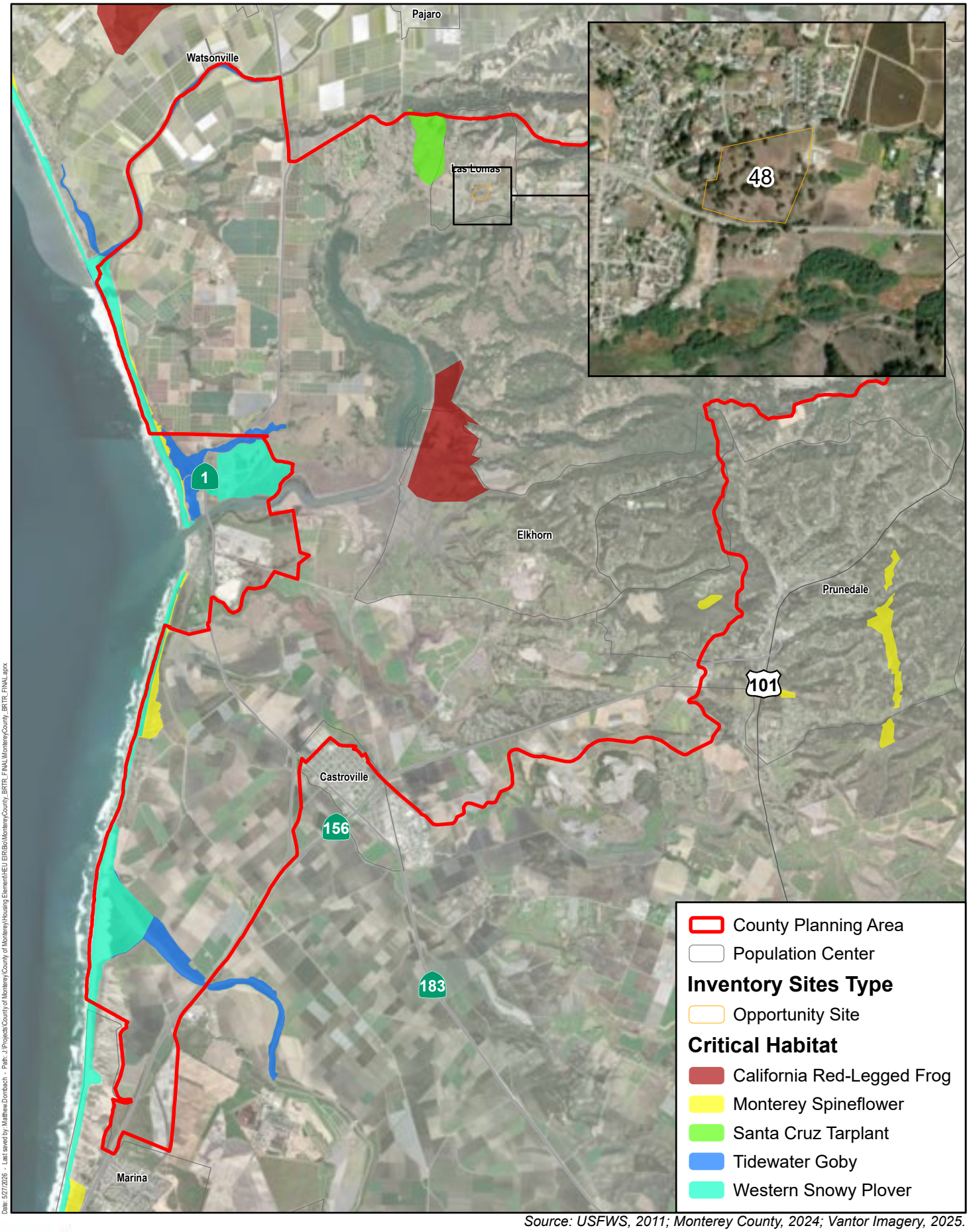
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Miles

**Figure 8f**

Critical Habitat in Greater Salinas Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.

Harris & Associates

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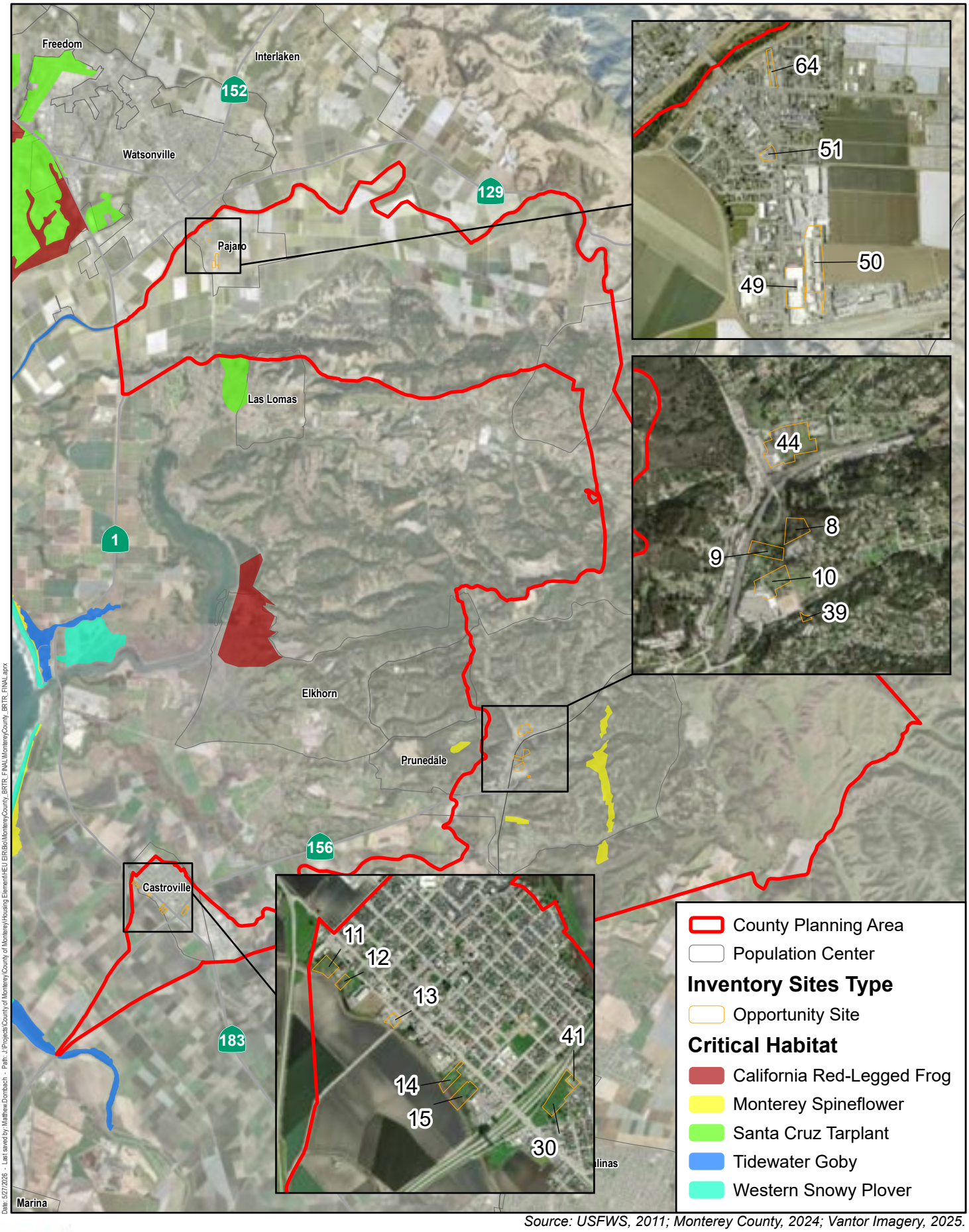
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**Figure 8g**

Critical Habitat in North County Land Use Plan (Coastal)

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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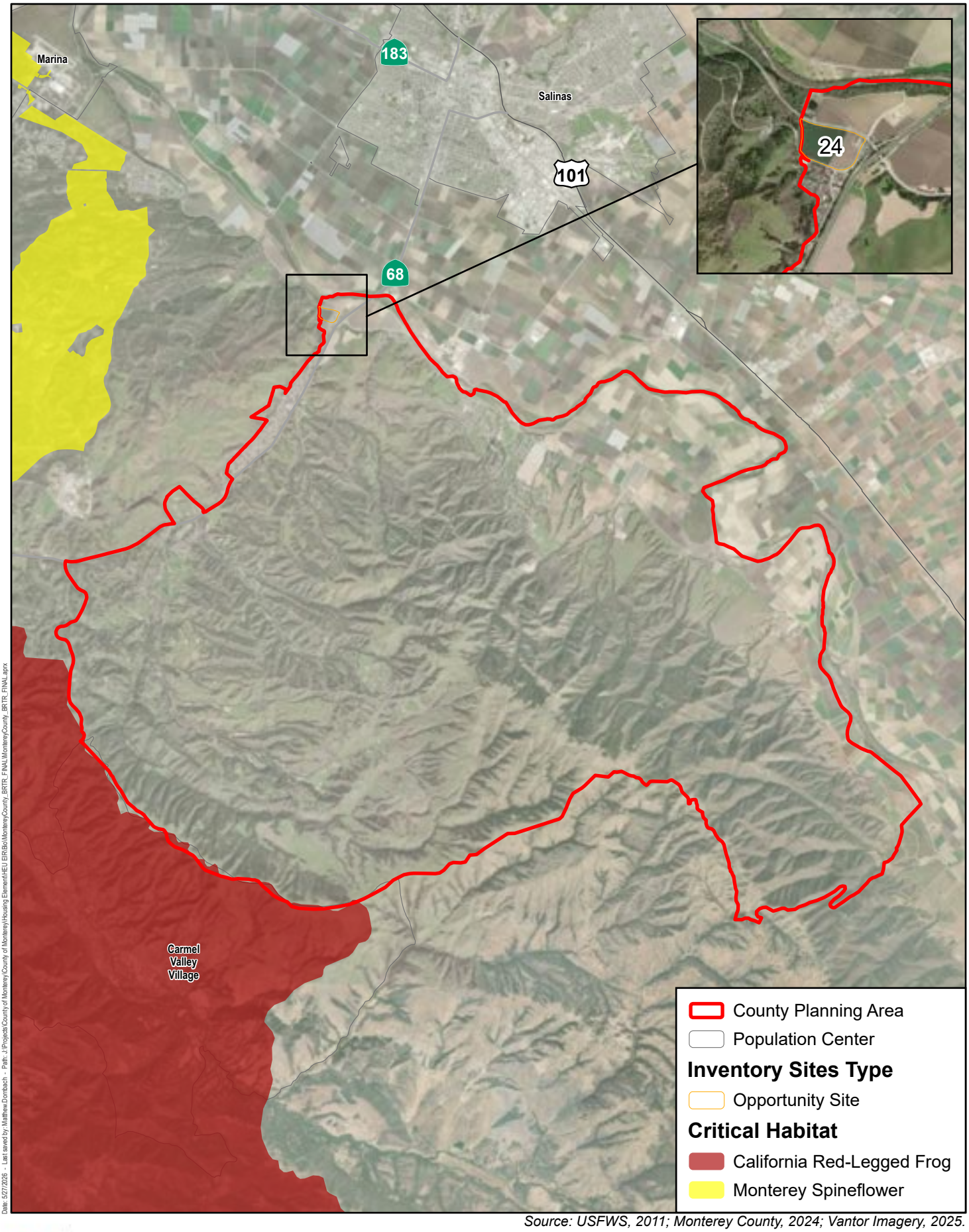
0 1.25 2.5

Miles

**Figure 8h**

Critical Habitat in North County Area Plan (Inland)

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)




*Source: USFWS, 2011; Monterey County, 2024; Vantor Imagery, 2025.*

Harris & Associates

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0 1.25 2.5

Miles

**Figure 8i**

Critical Habitat in Toro Area Plan

County of Monterey Draft Housing Element (Sixth Cycle 2023-2031)

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# Cultural Resources Technical Report

## County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update

**July 2026**

Prepared for:

**County of Monterey**
**168 West Alisal Street, 3rd Floor**
**Salinas, California 93901**

Prepared by:

**60 W. Alisal Street, Suite 200, 2nd Floor**
**Salinas, California 93901**

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## *National Archaeological Database Information*

| | |
|---|---|
| **Authors:** | Donna Beddow, M.A., RPA |
| **Firm:** | Harris & Associates<br>2375 Northside Drive, Suite 125<br>San Diego, California 92108<br>(619) 236-1778 |
| **Client/Project Proponent:** | County of Monterey<br>Housing and Community Development<br>21441 Schilling Place<br>Salinas, California 93901 |
| **Report Date:** | July 2026 |
| **Report Title:** | Cultural Resources Technical Report – County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update |
| **Type of Study:** | Desktop Survey |
| **New Sites:** | N/A |
| **Updated Sites:** | N/A |
| **USGS Quad:** | Carmel Valley, Chualar, Marina, Monterey, Moss Landing, Natividad, Prunedale, Salinas, San Lucas, Seaside, Spreckels, Thompson Canyon, and Watsonville East 7.5-minute Quadrangles |
| **Key Words:** | Pre-contact, Habitation, Game Field, Lithic Scatter, Gound Stone, Mortar Bowl Rim Fragment, Artifact Scatter, Historic, Fort Ord Buildings and Structures, Fort Ord Features, Ranch-style Residences, Folk Victorian Residence, Rancho Canada Golf Course, Pajaro River Levee, Carmel River/Esselen Trail, Door House, Hatton Dairy Barn, Meadows Home, Chalk Rock House, Old Carmelo School, Berwick Manor & Orchard, Carmel Valley Rock & Sand Co., Farm Center, Del Monte Milk Barn, Carmel Valley Airport, Edward Phinet House, Valley View Hotel, Residence (Chinatown) – 22 Brooklyn Street, Residence (Chinatown) – 26 Brooklyn Street, Old Pajaro School, Porter Vallejo Mansion, Old Chinese School, Prunedale |

Senior Citizens Center, J.B. Rogers-Cooper House, First Private School, Juan Bautista Castro House, Castroville Japanese Language School, Castroville School, Commercial Building – 10685 Main Street, Native Sons of the Golden West, Tribal Cultural Resource, Monterey Housing Element Update; 11020, 11040, 11098, 11100, 11150 Merrit Street, Castroville; P-37-000090/CA-MNT-001801H, P-27-000138/CA-MNT-000002, P-27-000385/CA-MNT-000280, P-27-000158/CA-MNT-000022, (P-27-001021/CA-MNT-0009650, P-27-003666, P-27-002900/CA-MNT-002257, P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, P-27-002747, P-27-002749, P-27-002912, P-27-004178, P-27-004242, P-27-004243, P-27-004246, P-27-004251, P-27-004252, P-27-004262, P-27-004056

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## *Acronyms and Abbreviations*

| | |
|---|---|
| AMSL | above mean sea level |
| CCR | California Code of Regulations |
| CEQA | California Environmental Quality Act |
| CHRIS | California Historical Resources Information System |
| CRHR | California Register of Historical Resources |
| DPR | California Department of Parks & Recreation |
| Harris | Harris & Associates |
| MLD | most likely descendant |
| NAHC | Native American Heritage Commission |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NRHP | National Register of Historic Places |
| PRC | California Public Resources Code |

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# Executive Summary

Harris & Associates prepared this Cultural Resources Technical Report in support of the Programmatic Environmental Impact Report for the proposed County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). This report is intended to provide the results of the cultural desktop survey and provide a program-level analysis of the potential impacts that could occur to cultural resources and Tribal Cultural Resources as a result of project implementation.

The project is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying the County of Monterey's Regional Housing Needs Allocation. Along with facilitating the Monterey County's Regional Housing Needs Allocation, the project must identify and analyze significant disparities in access to opportunity (Assembly Bill 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

An assessment of cultural resources and Tribal Cultural Resources was conducted through review of background data from the California Historical Resources Information System, the Native American Heritage Commission, and Tribal outreach. The Fort Ord buildings and structures, the Carmel River/Esselen Trail, and archaeological site P-27-004056 were identified as potentially significant based on prior evaluations that identified them as eligible for listing to the National Register of Historic Places. A copy of the study will be submitted to the Northwest Information Center upon approval from the lead agency. The project is required to be in compliance with all federal, state, and local regulations applicable to cultural resources and Tribal Cultural Resources.

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# Section 1 Introduction

This Cultural Resources Technical Report for the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project) Program Environmental Impact Report (PEIR) documents the cultural resources in Monterey County and addresses at a programmatic level the potential cultural resources and Tribal Cultural Resources (TCRs) impacts associated with the construction and operation of the project for Monterey County.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

For the purposes of this analysis, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

## 1.1 Purpose of the Report

At the request of the County, Harris & Associates has prepared this Cultural Resources Technical Report for the project to present documented cultural resources and TCRs that occur in the project area; identify potential impacts and recommend avoidance, minimization, or mitigation measures consistent with federal, state, and local rules and regulations.

This report includes a discussion of the environmental setting and project description; summary of the federal, state, and local regulations applicable to cultural resources and TCRs; methods for the literature review and desk top survey conducted for the project; results reflecting data collected during the desk top survey, including a description and evaluation of existing cultural resources; and an analysis of potential project impacts, and mitigation required to reduce potential impacts from project implementation.

The term "historical resources" refers to buildings, sites, structures, signs or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Significant resources are those resources which have been found eligible for listing or are listed in the California Register of Historical Resources (CRHR), National Register of Historic Places (NRHP), or local listing, as applicable.

The term "Traditional Cultural Property" refers to property that is eligible for inclusion in the National Register of Historic Places (NRHP) because of its association with cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community. Tribal Cultural Properties are rooted in a traditional community's history and are important in maintaining the continuing cultural identity of the community.

"Tribal Cultural Resources" are (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following: (A) included or determined to be eligible for inclusion in the California Register or Historical Resources or (B) included in a local register or historical resources as defined in Section 5020.1(k), or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1 of the California Public Resources Code (PRC). In applying the criteria set forth in Section 5024.1(c) of the PRC for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

The cultural investigation described in this report was implemented to support the County's responsibilities under the California Environmental Quality Act (CEQA) and to reduce impacts to cultural resources and TCRs resulting from the project.

# Section 2 Project Setting

## 2.1 Project Location

Monterey County is just south of the Bay Area. It is bounded by the Pacific Ocean to the west and San Benito County to the east and accessible by U.S. Route 101 from the north and south. Monterey County is one of the largest counties in the State of California, covering more than 3,300 square miles, and is composed of diverse natural habitats and residential communities. Monterey County is located on the north-central coast of California and is bordered by the following counties: Santa Cruz to the north; San Benito, Fresno, and King to the east; and San Luis Obispo to the south (Appendix A, Figures; Figure 1, Regional Location). The project area encompasses UMC, the geographic area overseen by the County and covered by the Sixth Cycle Housing Element Update (2023–2031). Regional access to Monterey County is provided through U.S. Route 101 traveling north–-south and State Route (SR-) 198 and SR-146 running east–-west. SR-1 also provides regional access along the Pacific coastline and SR-218, SR-68, and SR-183 are other major roadways serving Monterey County.

The project area includes 56 opportunity sites throughout Monterey County. Each opportunity site is assigned a number (e.g., Opportunity Site 1). Opportunity sites are spread among the County's nine Land Use Plan areas. These include the areas within the North County Inland Area Plan, North County Coastal Land Use Plan, Greater Salinas Area Plan, Greater Monterey Peninsula Area Plan, Ford Ord Master Plan, Toro Area Plan, Carmel Valley Master Plan, Carmel Area Land Use Plan, and Central Salinas Valley Area Plan (Figures 2a through 2i, Project Location).

## 2.2 Project Description

The project is required to identify sites and zoning designations that can accommodate housing developments capable of satisfying Monterey County's Regional Housing Needs Allocation of 3,326 housing units distributed across four income levels (1,070 extremely low/very low income, 700 low income, 420 moderate income, and 1,136 above moderate income housing units). Along with facilitating the County's Regional Housing Needs Allocation, the project must identify and analyze significant disparities in access to opportunity (Assembly Bill [AB] 686 – Affirmatively Furthering Fair Housing Act). The Affirmatively Furthering Fair Housing Act requires that a jurisdiction's Housing Element promote inclusive communities and further housing choice through government programs, policies, and operations that recognize existing racial and economic disparities and remediate these disparities.

The County includes the capacity for at least 5,897 units, comprising opportunity sites (4,434 units), pipeline sites (1,117 units), and accessory dwelling units (346 units). Opportunity sites are sites for which the County has a reasonable expectation that housing development could occur, although no proposals or entitlements have been submitted. Entitled/proposed (pipeline sites) are

sites where housing has been proposed or entitled and where development is expected to receive a building permit or certificate of occupancy.

## 2.3 Environmental Setting

The following is a description of the existing conditions in the project area.

### 2.3.1 Land Use

The UMC is largely undeveloped open space, with the majority of urban and suburban development following SR-1 and U.S. Route 101. Other uses include residential, commercial, agricultural, industrial, military, civic, and public/quasi-public (County of Monterey 2010).

### 2.3.2 Geology and Soils

Monterey County is bounded by the Pacific Ocean to the west and San Benito County to the east. The general topography varies throughout Monterey County and includes coastal bluffs, mountain ranges, and valleys (Figure 3, USGS Topographic Map – Index, and Figures 3a through 3i). Monterey County lies within several quadrangles of the California Geological Survey Map, including but not limited to the Carmel Valley, Chualar, Marina, Monterey, Moss Landing, Natividad, Prunedale, Salinas, San Lucas, Seaside, Spreckels, Thompson Canyon, and Watsonville East Quadrangles. Major faults in Monterey County are San Andreas, Palo Colorado-San Gregorio, and Monterey Bay – Tularcitos. There are also other lesser-known faults such as Reliz, Rinconada, Garrapata, Rocky Point, and more. Development in the UMC is further limited by soils in the area that are susceptible to liquefication (OES 2022).

A total of 39 soil types are present on the opportunity sites in the project area, including Alviso silty clay loam, Antioch very fine sandy loam, Arnold loamy sand, Arnol-Santa Ynex complex, Arroyo Seco gravelly loam, Baywood sand, Chamise channery loam, Chamise shaly loam, Chualar loam, Clear Lake clay, Corducci-Typic Xerofluvents, Cropley silty clay, Diablo clay, Dibble silt loam, Elder sandy loam, Elder very fine sandy loam, Elkhorn fine sandy loam (and thin surface variant), Garey sandy loam, Lockwood channery loam, Lockwood shaly loam, Metz fine sandy loam, Mocho silt loam, Narlon loamy fine sand, Oceano loamy sand, Pacheco clay loam, Pico fine sandy loam, Placentia sandy loam, Rincon clay loam, rock outcrop/Xerorthent association, Salinas clay loam, Santa Lucia channery clay loam, Santa Lucia shaly clay loam, Santa Lucia-Reliz association, Santa Ynez fine sandy loam, Tijunga fine sand, and Xerorthents (dissected, loamy, and sandy) (Figure 4, Soils – Index, and Figures 4a through 4i; USDA 2025a, 2025b).

### 2.3.3 Climate

On a regional level, Monterey County has a Mediterranean climate, which is characterized by mild, wet winters and warm, dry summers, largely defined by the Pacific Ocean and the Santa Lucia Range. Habitats in this region include both mesic (moist) habitats, such as redwood forest, and

xeric (dry) habitats, such as coastal scrub. Generalized climate in the region is characterized by warm, dry summers and cold, moist winters, which pushes the growing season to the wet months of the year (late winter to early spring). Vegetation often goes dormant (senescent) during the later summer months until initial rains start in the fall. The rainy season in Monterey County typically lasts from November through April and has an annual winter precipitation average of approximately 19 inches (Western Regional Climate Center 2025).

### 2.3.4 Flora and Fauna

Harris biologists (Harris & Associates 2026) have identified biological resources with the potential to occur in the project based on a review of existing maps, literature, and other biological studies conducted in the area. The project area consists of six vegetation communities and two land cover types, including freshwater, freshwater marsh, mixed conifer forest, oak woodland, annual grassland, coastal scrub, agricultural land, and urban/developed land. In addition, 26 wildlife species (three invertebrates, two fish, six amphibians, four reptiles, five birds, and six mammals) have been documented in the project area. These resources would have been used by Native American people. Specifically, they would have used acorns, broom Baccharis, buckwheat, lemonade berries, laurel sumac, sunflower, prickly pear cactus fruit, white sage, wild onion, and yucca. A large number of shellfish and fish would have been available. These were important food resources pre-contact.

## 2.4 Cultural Setting

Cultural resources found throughout Monterey County are reminders of the County's past. Cultural resources are the traces left by pre-contact or historic people who inhabited the Monterey County region. They encompass both the built and the archaeological environments, and could include TCRs. The following cultural background (pre-contact, historical, and ethnographic) is taken from the County's General Plan Environmental Impact Report (County of Monterey 2008a).

### 2.4.1 Pre-Contact Period

The earliest human presence in what is now Monterey County probably dates back as far as 10,000 to 12,000 years ago. The first inhabitants were nomadic hunters, banding together in small groups, following game herds for their subsistence. The earliest settlements began to appear around 7,500 to 8,000 BCE These occupation sites, which comprised small villages, indicate a cultural shift to a different form of subsistence based on exploitation of a broader range of local resources, including marine and freshwater food sources (fish and shellfish), game (rabbits, deer, elk), acorns, and wild roots, and nuts and berries. By 6,000 BCE, at least four such village sites from this period are known to have existed in the area around Moss Landing and Elkhorn Slough, undoubtedly because of the abundance of resources in this area.

A little later, a second shift occurred, again reflecting a change in subsistence strategy that is evident in changes in pre-contact settlement patterns. This change is thought to have occurred because of in-migration of a different people from the north, who were part of a larger movement emanating from farther east. During the middle period (2,500 to 1,600 years ago), villages became larger but fewer in number. They were augmented by a large number of small, widely distributed sites for the collection, processing, and distribution of resources. This new settlement pattern reflects a fundamental shift in strategy from smaller sites dependent on proximity to resources, to villages supported by outlying sites specializing in collecting and processing resources. Rather than being constrained to living near the food source, the people developed a specialized system to collect and transport resources to population centers.

This new strategy of collection rather than foraging allowed an even broader use of resources and over time resulted in a larger population. The ocean and nearby salt and freshwater marshes were used in conjunction with the oak woodland, savanna, and grassland habitats that provided game, acorns, and other resources. The larger collection strategy enabled early inhabitants to expand in number. The specialization of roles allowed the culture to develop. Instead of generalized foraging, individualized skills developed, such as production of arrowheads, musical instruments, shell beads, and tools. During this middle period of prehistory, the local Indigenous culture reached its peak in terms of cultural expressions of concentrated wealth.

During the period between CE 900 and 1,100, a severe climatic shift began. There was a warming period in which the ocean temperature rose, perhaps not unlike a prolonged El Niño event. The marine and coastal environment became less productive and less reliable as a food source. These conditions necessitated another adaptation in subsistence strategy, stimulating further movement inland and greater dependence on acorns as a staple food. Acorns were particularly useful because they could be stored for as long as a year, providing a secure supply of winter food. The climate change led to a redistribution of occupation sites into many different environments. Villages became further disseminated and very seasonal. The overall effect was decentralization with many new sites farther inland. Settlement sites became specialized according to seasonal use, differentiating into winter and summer sites. In wintertime, occupants would move inland, seeking the shelter and resources in inland canyons and habitats. At this time Rancho San Carlos was first occupied intensively, as a winter village site. The resource-rich regions of what is now Fort Hunter Liggett, along the Nacimiento River, were also intensively occupied at the same time.

> At roughly CE 1500, the climate shifted again, entering what is known as the Little Ice Age, a colder period which lasted until at least CE 1800. Collection behavior became very specialized and migratory. The Indigenous people were still in this middle period of subsistence behavior when Spanish explorers saw them for the first time.

### 2.4.2 Ethnohistoric Period (Post-CE 1769)

#### 2.4.2.1 Costanoan/Ohlone

The Costanoan were speakers of languages in the Penutian language family. The Costanoan, now commonly referred to as Ohlone, consisted of over 50 Tribal groups, speaking eight different but related languages that included Karkin (northern and southern portions of the Carquinez Strait); Chochenyo (east shore of San Francisco between Richmond and Mission San José and probably Livermore Valley); Tamien (southern San Francisco Bay and lower Santa Clara Valley); Ramaytush (San Mateo and San Francisco Counties); Awaswas (Santa Cruz Costanoan between Davenport and Aptos); Mutsun (Pajaro River drainage); Achastan/Rumsen (lower Carmel, Sur, and lower Salinas Rivers); and Chalon (Salinas River). This territory encompasses a lengthy coastline as well as several inland valleys.

The Ohlone relied on gathering, hunting, and fishing to procure a wide variety of flora and fauna for subsistence and material needs. The Ohlone had both permanent village locations and seasonal camps to take advantage of the diverse terrain along the central coast. The first Spanish encounters with the Ohlone occurred as early as 1602 with the Sebastian Vizcaino navigational expedition, followed by the inland exploratory expedition of Gaspar de Portola in 1769. Seven missions were established in Ohlone territory between 1770 and 1797. Ohlone were both forcibly and voluntarily brought to the missions along with other Tribes, including Yokuts, Miwoks, Esselen, and Patwin. Once part of the mission system, the Ohlone were discouraged or forced from practicing their traditional rituals and social activities. Contact with Euro-Americans resulted in a drastic reduction of population due to disease, violence, and a declining birth rate. The Ohlone population fell from an estimated 10,000 in 1770 to fewer than 2,000 by 1832. Following secularization of the missions in 1834, most of the remaining Ohlone moved into growing towns and surrounding ranchos to work as laborers or domestic servants. By the mid-twentieth century, the Ohlone population was reduced to 130 in the San Francisco Bay Area, although some research suggests that in the early 1970s there may have been approximately 200 surviving Ohlone.

In the 1960s, the Ohlone Indian Tribe was incorporated as a formal organization, now holding title to the Ohlone Indian cemetery in Fremont, California. In the 1970s, the Pajaro Valley Ohlone Indian Council was created and was actively preserving sites of traditional importance. Four Ohlone groups had sought recognition: the Amah-Mutsun Tribal Band, the Carmel Mission Band, the Indian Canyon Band, and the Muwekma/Ohlone Tribe. Similarly situated as previously federally recognized Tribal groups, were the Ohlone Costanoan Esselen Nation of the Monterey Bay region, historically identified by the Bureau of Indian Affairs under the jurisdiction of the Reno and Sacramento Agencies as the Mission San Carlos Indian Band and Monterey Band of Monterey County, and the Amah-Mutsun Tribal Band identified by the Bureau of Indian Affairs as the San Juan Bautista Band. The Muwekma Ohlone Tribe has historically used the term "Ohlone" throughout the twentieth century. On their 1928–1932 and 1968–1972 Bureau of Indian

Affairs enrollment applications, the families used either Ohlone or Mission San José Tribe. The Amah-Mutsun community used only Mission San Juan Bautista Tribe, and the Monterey community used either Esselen or Mission Carmel Tribe.

There have been continued efforts to document genealogies by using mission records to piece together family and Tribal history. The groups mentioned above, as well as other individuals, have been actively involved in the management and preservation of their heritage and are frequently involved in the management of cultural resources. Ohlone descendants continue to conduct ceremonies and traditional practices such as the gathering of plant materials for basket making. Some of these activities are known to take place on Fort Ord Public Lands in the Central Coast Management Area.

#### 2.4.2.2 Esselen

Peoples of the Esselen language group inhabited the area south of Monterey, including the upper drainage of the Carmel River south to the vicinity of Junipero Serra Peak and west to the Sierra de Salinas. The area encompassed a 25-mile stretch along the Pacific Coast. Research in the early 1970s recognized six Esselen tribelets: Excelen, (Carmel Valley), Echilatg (Santa Lucia Range), El Pino (lower Arroyo Seco), Cuchunu (Arroyo Seco), Eslenajan (near Soledad Mission), and Tucutnut (Carmel River). Very little is known about the lifeways of the Esselen prior to Euro-American contact. Documentation of Esselen lifeways has been minimal, and much of what is known about the group is gleaned from archaeological research and mission records. The population of the Esselen in the eighteenth century is estimated at 500 to 1,285 persons. With the founding of Mission San Carlos Borroméo de Monterey at Carmel in 1770, many Esselen were moved to the mission. It has been suggested that by the mid-1800s they were totally absorbed into the mission population, where many also perished. Families have taken steps to preserve their history and identities as Esselen by founding the Ohlone Costanoan Esselen Nation, currently located in and around Carmel Valley. The Ohlone Costanoan Esselen Nation consists of 500 members and has been petitioning the federal government to regain recognition as a formal federally recognized Tribe.

### 2.4.3 Historical Period

Monterey County has been called the “cradle of California history,” owing to its central position relative to historical activities. Monterey Bay became the focus of several Spanish exploratory expeditions after it was first noticed by Juan Cabrillo in 1542. Sebastian Vizcaino, who sailed into it in 1602, named the bay after Conde de Monterrey, Viceroy of Spain. The Franciscans founded three missions (San Carlos Borroméo, San Antonio de Padua, and Nuestra Soñora de Soledad) in what is now Monterey County, and these, along with the Presidio established in the late 1700s and eight large ranchos that formed from land concessions to Spanish army veterans, became focal points of activity.

When the Mexican Republic formed in 1822, the missions were secularized and new ranchos developed on 68 Mexican land grants. A robust economy emerged, based on cattle ranching on these large ranchos, some of which exceeded 10,000 acres. This economy received a great boost when the Mexican regime opened Monterey harbor to foreign trade. The Custom House in Monterey became the site for collection of duties, providing the main source of income for Alta California's government. The harbor enabled rancheros to trade their hides and tallow for products from around the world. This commercial vitality led to Monterey's role as the Mexican capital of California.

In May 1846, the United States declared war against Mexico, commencing the Mexican-American War. Commodore John Drake Sloat sailed into Monterey Bay two months later and demanded surrender of the port. On orders to secure men and horses for the war in Southern California, Lt. Colonel John C. Fremont arrived in Monterey as well. In November, as Fremont and his men were driving horses from San Juan Bautista to Monterey, Californios led by Manuel Castro attacked them. The Battle of Natividad was the only military engagement fought in Northern California during the Mexican-American War. Organized resistance to the American occupation ended in 1847. On February 2, 1848, the Treaty of Guadalupe Hidalgo was signed, giving the United States possession of Alta California.

Monterey continued to play a key role for some time after the Mexican-American War. At the beginning of the American period, the convention to draft and sign California's new constitution convened at Colton Hall in Monterey, considered California's finest building at the time. This period coincided with the California Gold Rush, and the market for tallow and hides shifted to a demand for beef to feed the population of gold prospectors. By the 1870s, dairy farming was introduced in the area around Gonzales and Soledad. This enterprise required irrigation to support alfalfa production, a practice based on rudimentary canal systems used earlier by friars at the missions.

In 1863 and 1864, a disastrous drought wiped out the cattle industry. Grain production quickly became Monterey County's principal activity. Between 1857 and 1865, the County's grain acreage increased from 2,450 to 27,358 acres. The resulting grain surplus was an incentive to build the harbor at Moss Landing from which farmers could ship their grain products worldwide. Bixby's Landing played a similar role for the export of tanbark and lumber from the Big Sur coast. Transportation soon became a major factor in supporting the County's growing economy. In 1872, the Southern Pacific Railroad extended its rail line to Salinas from Pajaro. As the railroad pushed farther south, it opened new markets and stimulated settlement of new towns. From Salinas, it extended southward to Chualar, followed by Gonzales and Soledad, as landowners donated rights-of-way across their ranches. With this new transport capability, grain could be loaded at Soledad, expanding the acreage available for cultivation. By 1875, nearly 100,000 acres of grain were harvested in the County, making it one of California's principal grain-producing regions.

In the 1880s, a transformation began in the lower Salinas Valley, initiated by systematic draining and reclamation of the extensive marshland and several dozen lakes in the northern end of the valley. By the 1880s, Chinese laborers had cleared 1,000 acres of land, increasing its value from $28 to $100 an acre. As land prices rose, dry farmers and cattle and sheep ranchers sold out or shifted to row crops.

Widespread sugar beet cultivation in the Salinas area prompted Claus Spreckels to open what was then the largest sugar beet refinery in the world in 1899, south of Salinas. Capacity of the plant reached 3,000 tons of beets per day—more than all of the other refineries in California combined. Spreckels also built the town that still bears his name around the facility. The community of Spreckels was one of California's few company towns and was home to a variety of businesses, a school, a church, and cottages for company employees.

The extension of the railroad, improved irrigation systems, refrigerated freight cars, and other innovations in technology transformed the agricultural economy of the Salinas Valley, further opening up cultivated lands to row crops in place of dry farming dominated by grain crops. This development established the basis for the Salinas Valley's modern economy.

In the late nineteenth century, Monterey County became a destination for tourism and resort activities. Three resorts with hotels developed at Paraiso, Tassajara, and Slates Hot Springs. Pacific Grove was founded as a religious and cultural retreat, growing from a tent city to a town of small Victorian cottages. In the early 1900s, Pebble Beach was subdivided and became a fashionable summer resort. In Carmel, the Arts and Crafts movement took hold in local architecture, as the town became a colony for artists and writers.

On the coast, at Moss Landing and in Monterey, sardine fisheries flourished for a little less than two decades between 1931 and the late 1940s. The cannery buildings at both of these locations are historical remnants of that brief period before the sardines and then the canning industry disappeared.

## 2.5 Previous Investigations

Record searches were conducted for the project area. Staff conducted the records search using the California Historical Resources Information System (CHRIS) from the Northwest Information Center (NWIC) (Confidential Appendix B, CHRIS Background Data), the NRHP, and the California Register of Historical Resources (CRHR). Two hundred and eight previous cultural studies have been conducted within the project area. Twenty-nine resources have been previously recorded within the project area consisting of six pre-contact, 22 historic, and one multi-component sites.

### 2.5.1 Pre-Contact Sites

The pre-contact sites include two habitation (P-27-000138/CA-MNT-000002 and P-27-000385/CA-MNT-000280), one game field (P-27-000158/CA-MNT-000022), artifact scatters (P-

27-001021/CA-MNT-0009650 and P-27-003666), and one mortar bowl rim fragment (P-27-002900/CA-MNT-002257).

#### 2.5.1.1 P-27-000138/CA-MNT-000002

P-27-000138/CA-MNT-000002 (habitation) was originally recorded by A.R. Pilling in 1948 who identified bedrock milling features and pestles. In 1975, Stafford, William Roop, Gary Berg & Kathy Flynn surveyed the site. They noted that the new Reservation and River Roads had cut through the site which had almost totally destroyed it. In 1982, William Roop again evaluated the site and identified a midden deposit consisting of dense shell lenses, burned rock, chert flakes, ground stone tool fragments. He described the site as extending from the bluff edge that forms the northeasterly edge of the parcel, upslope along both sides of Reservation Road for a distance of 1,200 feet. Mary Gerbic and Alex DeGeorgey (2013) monitored the site for the PG&E DFM 813-01 project. Midden soils were identified; however, they were absent of artifacts or ecofacts. The last evaluation occurred in 2019 by Sarah Brewer & Scott Miller (2019a, 2019b) for the installment of an overhead fiber-optic cable. No artifacts or midden soils were identified.

#### 2.5.1.2 P-27-000158/CA-MNT-000022

P-27-000158/CA-MNT-000022 was recorded in 1948 by A.R. Pilling and Ann Fisher. It is recorded as "a flat area supposed to have been game field in pre-mission period." Updated surveys and evaluations have not occurred at this site.

#### 2.5.1.3 P-27-000385/CA-MNT-000280

According to Phil Kaijankoski (2020), P-27-000385/CA-MNT-000280 (habitation) "was originally recorded in 1950 by A.R. Pilling." He identified the site as bulldozed and destroyed ca. 1940. It is unknown if Pilling visited the site, or if he recorded it based on correspondence with a reporter from the Monterey Peninsula Herald. An attempt to search the archives of that newspaper for information about this site was unsuccessful." Sarah Brewer and Scott Miller surveyed the site in 2019 and did not encounter any cultural materials. Eleni Ziogas also surveyed the site in 2019 as part of the Caltrans Scenic Route 68 survey. Efforts to identify the site were unsuccessful. CA-MNT-3, and CA-MNT- 4/267, two habitation sites with subsurface deposits, are located roughly 30 and 100 meters south of CA-MNT-280 are identified within the SR-68 Caltrans corridor. Ziogas suggest that these two sites likely encompass CA-MNT-280, or reflect associated activity areas, and suggest that subsurface deposits may extend under SR-68 and into the Caltrans Right-of-way. The final evaluation by Kaijankoski, identifies that "previously, the NWIC did not have a location for this trinomial; however, when transitioning to a geographic information system (GIS) mapping interface the entire extent of Fort Ord, a 45-square-mile area (28,800 acres) northeast of Seaside, was selected as the boundaries of CA-MNT-280." He conducted testing at a portion of the site east of San Benancio Road with negative results.

#### 2.5.1.4 P-27-001021/CA-MNT-0009650

P-27-001021/CA-MNT-0009650 was originally recorded in 1979 by Trudy Haversat who recorded the site based on an informant report. The informant recovered a stone bowl while excavating a fence post. The site was tested in 1986 by Gary Breschini & Trudy Harvest. A lithic scatter consisting of a small number of chert and obsidian flakes were recovered.

#### 2.5.1.5 P-27-003666

P-27-003666 was recorded by Gail Bellenger in 2018. The site consists of ground stone tools that were not in situ and out of context. According to Bellenger, the artifacts were likely a surface expression of the original location but were relocated to a created hill likely due to agricultural activities. A surface collection and testing were conducted, and it was determined that the adjacent fallow field is likely the original context for these artifacts. Bellenger identified the site as "eligible to both the NRHP and the CRHR due to its importance in the cultural sequence of the Indigenous Ohlone/Esselen people, and because it is located close to the Carmel Mission that would have most likely been located to existing villages or encampments."

#### 2.5.1.6 P-27-002900/CA-MNT-002257

P-27-002900/CA-MNT-002257 was recorded by Patrick Cave (2008). He identified the site as a large pre-contact site with midden soils, fire-affected rock, small mammal bone fragments, chert debitage, and shell. A basalt mortar bowl rim fragment was collected. According to Cave, the "site is terminated on the northeast by Merritt Street, and on the west by the graded southwest extension of Poole Street. The site extends southwest to the floodplain of Tembladero Slough, and is visible to the east on adjacent parcels south of Union Street." The site was tested with positive results confirming areal extent and site depth. He identified that the " site had been partially disturbed due to dirt road traffic, parking and soil discing. However, it should be mostly pristine just below the surface on most of the parcel."

### 2.5.2 Historical Resources and Multi-Component Sites

The historic and multi-component resources include structural remains of a hangar for the first commercial airport on Monterey Peninsula (P-27-000090/CA-MNT-001801H), Fort Ord buildings, structures, and features (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, P-27-002747, P-27-002749, and P-27-002912), Pajaro River levee (P-27-004178), single-family residences (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252), Rancho Canada Golf Course (P-27-004262), and the Carmel River/Esselen Trail (P-27-004056).

#### 2.5.2.1 Monterey Peninsula Airport Hangar Structural Remains (P-37-000090/CA-MNT-001801H)

P-27-000090 consists of the structural remains of a hangar constructed in 1928 and associated with the first commercial airport on the Monterey Peninsula. It was built on a north–south axis, and included wood frame construction with corrugated, galvanized metal walls and roof. Sliding doors were present at both ends of the hangar. Maddux Airlines of San Diego, the only commercial airline to use the field and facilities, constructed the hangar. The site includes two features, (1) structural remains, and (2) watering trough. The site was used as an airplane hangar (1928–1936), and subsequently was used as an agricultural watering station and equipment storage. According to Wake et al. (1993), site integrity has been impacted to a great degree by cattle grazing, wind, and vandalism, and 90 percent of the surface has been disturbed to a maximum depth of one foot.

#### 2.5.2.2 Fort Ord

Fort Ord was established in 1917 as a training and staging facility for infantry troops. The base was decommissioned in 1991 and formally closed in 1994. Buildings and structures (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, P-27-002747, P-27-002749, and P-27-002912) were assessed for historical significance between 2003 and 2007 (Jody R. Stock, Holman and Associates [2005, 2007], and Ian Alexander, Juan Cervantes, Matthew Clark). The majority of the identified buildings (mess halls – T27 and T29-38), latrine and showers (T74-83), recreation buildings (T-85, T-90, T-98-100, T-106), warehouse (T-120-121, T-1321), post office (T-101), firehouse (T-105), auto shop (T-138, T-140) and buildings T-23-24, T-87, T-97, and T-104) on record with the NWIC were recorded and evaluated for Section 106 review by Jody R. Stock (2003, 2006). All structures except T-85 were determined eligible for listing on the NRHP under criterion A. According to Stock (2003), buildings T-138 and T-140 did not retain the same amount of integrity as the balance of the structures. Building T-138 was identified as having been "altered with a large metal, roll-down door on the front façade, thereby altering the design, materials, and workmanship." Alexander et. al. (2005, 2007) recorded Feature EGP-1 and EGP-3 in 2005 and updated the feature's status in 2007. Alexander et. al. described the features as follows:

> Feature EGP-1 was a small circular detention pond/reservoir, with an artificially raised berm on the north and east sides only, flanking Inter-Garrison and Chapel Hill Roads respectively. The west and south sides of the pond were contained by rising topography. This berm was about seven feet high on the east side. The pond center was overgrown with willows. There was a wood frame/plank water height gauging station at the east comer with one-foot increments marked to eight feet. It was fastened with wire nails. A buried strip of asphalt and a 24 by 60 foot concrete slab were identified on the south half of the east berm during monitoring. The maximum dimensions for the feature were approximately 400 feet by 400

feet. The feature was totally destroyed prior to May 31, 2007 by construction on the East Garrison Project.

Feature EGP-3 is a wide rectangular artificially flat area (1200 feet east/west, 400 feet north/south) directly west of Feature EGP-1. It was situated between two low ridges and had an all metal post wire fence defining the perimeter. Much of the surface was covered with gravel and had patches of ice plant, coyote bush, plantain, and Russian thistle. There were two nearly identical concrete pads (T-140, T-138) measuring 84 by 38 feet inside, adjacent to a paved access road. These pads had 12-inch-high footing walls on all sides except the street front. Each of these pads had two oblong vehicle repair pits. A flat concrete "modern looking" pad (T-142) measuring 102 by 43 feet was situated north of T-140. The feature area is +/- 11 acres. Monitoring in 2007 identified buried cast concrete saddle tank supports as a 1940s gas or fueling station location; a mortared granite boulder retaining wall fragment; a Hemingray-16 (1919-1950s) insulator; a buried concrete slab measuring 15 by 10 feet. The feature (EPG-3) was destroyed by May 31, 2007.

Although the area in which these buildings and structures are located has not been formally listed as a historic district under the CRHR or NRHP, many of the buildings and structures are still extant.

#### 2.5.2.3 Pajaro River Levee (P-27-004178)

The Pajaro River levee (P-27-004178) was recorded by David Hickman in 2021. According to Hickman, "it was constructed in 1949 by the U.S. Army Corps of Engineers. The levees run from the river mouth to river mile 10.6 on left (south) bank and river mile 11.9 on the right (north) bank, protecting lands around most of the lower reach of the river." Hickman evaluated the resource for significance and determined that "the levee lacks historical significance and does not meet the criteria for listing in the NRHP."

#### 2.5.2.4 Single-Family Residences (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252)

Single-family residences greater than 50 years in age are identified within the project area (P-27-004242, P-27-004243, P-27-004246, P-27-004251, and P-27-004252). They are all located on Merritt Street (111020, 111040, 111098, 111100, 11150) in Castroville. All are Ranch-style except the residence at 11040 Merritt Street that was constructed in the Folk Victorian style. These residences were surveyed and recorded for Section 106 review by Steven J. Melvin et al. (2019) for the MON 183 Castroville Improvement Project. The structures were determined not eligible for listing to the CRHR or NRHP, and are not listed on the Monterey County Register of Historic Resources.

#### 2.5.2.5 Rancho Canada Golf Course (P-27-004262)

The Rancho Canada Golf Course opened in 1970 and was constructed in the Spanish Colonial Revival style. It was recorded and evaluated by James Williams (2018) for the Palo Corona

Regional Park General Development Plan. The golf course was determined not eligible for listing to the CRHR or NRHP. In addition, it was determined to not be eligible for designation under the County of Monterey regulations.

#### 2.5.2.6 Carmel River/Esselen Trail (P-27-004056)

The Carmel River/Esselen Trail is the only identified multi-component resource. The Department of Park and Recreation (DPR) form prepared by Glenn Yanagi (2023) identified that a DPR form was not prepared for this resource when it was evaluated in 1999 by McCarthy. A portion of the trail was evaluated for the New Los Padres Dam and Reservoir project. It was identified as a traditional place/Traditional Cultural Property (TCP) and contributor to the Xasáuan District. The resource was identified as significant under criterion A of the NRHP based on "knowledge that has been passed down orally through the generations reaching into the last century." According to Yanagi, "the study by McCarthy identified that portions of the TCP within the New Los Padres Dam and Reservoir project area would be inundated and alter the setting of the remaining portions of the TCP."

## 2.6 Applicable Regulations

Cultural resource and TCR regulations that apply to the project are CEQA, California Health and Safety Code, provisions of the CRHR, and County regulations. Historical and archaeological districts, sites, buildings, structures, and objects are assigned significance based on their exceptional value or quality in illustrating or interpreting the heritage of Monterey County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance.

### 2.6.1 Federal Level Regulations

#### 2.6.1.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) (42 USC Section 4321) requires that cultural resources be considered when assessing the environmental impacts of proposed federal projects. Responsibilities of NEPA include the preservation of important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment which supports diversity, and variety of individual choice. NEPA requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment.

#### 2.6.1.2 National Historic Preservation Act

The National Historic Preservation Act (NHPA) (16 USC 470 et seq.) establishes the nation's policy for historic preservation and sets in place a program for the preservation of historic properties by requiring federal agencies to consider effects to significant cultural resources (e.g., historic properties) prior to undertakings.

Section 106 of the NHPA requires federal agencies to take into account the effects of projects on historic properties, which are resources included in or eligible for listing in the NRHP. The purpose of Section 106 is to avoid unnecessary harm to historic properties from federal actions. It also gives the Advisory Council on Historic Preservation and the State Historic Preservation Office an opportunity to consult (36 CFR 800). Federal agencies issuing permits or providing funding for the proposed project would be required to comply with NHPA requirements.

#### 2.6.1.3 National Register of Historic Places

The NRHP is the nation's official list of historic places. The NRHP is overseen by the National Park Service and requires that a property or resource eligible for listing in the NRHP meet one or more of the following four criteria at the national, state, or local level to ensure integrity and obtain official designation:

a. The property is associated with events that have made a significant contribution to the broad patterns of our history.
b. The property is associated with the lives of persons significant to our past. Eligible properties based on this criterion are generally those associated with the productive life of the individual in the field in which the person achieved significance.
c. The property embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic value, or represents a significant and distinguishable entity whose components lack individual distinction.
d. The property has yielded, or is likely to yield, information important to prehistory or history.

In addition to meeting at least one of these four criteria, listed properties must also retain sufficient physical integrity of those features necessary to convey historic significance. The register has identified the following seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

Properties are nominated to the NRHP by the State Historic Preservation Officer of the state where the property is located, by the Federal Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if on Tribal lands. Listing in the NRHP provides formal recognition of a property's historic, architectural, or archaeological significance

based on national standards. Documentation of a property's historic significance helps provide for the preservation of the resource.

## 2.6.2 State Level Regulations

### 2.6.2.1 California Environmental Quality Act

According to CEQA, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (California Public Resources Code, Section 5024.1; 14 CCR 4852) including the following:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the CEQA Guidelines) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

### 2.6.2.2 California Register of Historical Resources (California Public Resources Code, Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California Legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (PRC Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resources (refer to 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of pre-contact and historical resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

#### 2.6.2.3 California Health and Safety Code, Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code, Section 7050.5, requires that, if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains (California Health and Safe Code, Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) within 24 hours (California Health and Safe Code, Section 7050.5c). The NAHC will notify the most likely descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

### 2.6.3 County of Monterey

#### 2.6.3.1 2010 General Plan

The Conservation and Open Space Element of the Monterey County General Plan (2010 General Plan) (County of Monterey 2008a) includes the following archaeological resources, and Native Californian cultural sites, sacred places, and burial sites goals and policies:

## Archaeological Resources

- **Goal OS-6:** Encourage the Conservation and Identification of the County's Archaeological Resources
  - **OS-6.1 –** Important representative and unique archaeological sites and features shall be identified and protected for all parcels with undisturbed natural conditions (i.e., ungraded properties), consistent with State Office of Historic Preservation guidelines and definitions employed on a statewide basis, including Phase I, II, and III studies.
  - **OS-6.2 –** Information on the location and significance of the County's archaeological resources shall be compiled and used in the environmental and development review process. The County shall rely on and participate in the statewide inventory work of the California Native American Heritage Commission and the State Office of Historic Preservation. All Phase I, II, and III studies, and records of Native Californian consultation, shall be filed with appropriate state agencies and local Tribes as well as local data source compilations maintained by the County. The County shall work with local Tribes to update County GIS maps showing high, moderate, and low archaeological sensitivity areas.
  - **OS-6.3 –** New development proposed within moderate or high sensitivity zones, or within 150 feet of a known recorded archaeological and/or cultural site, shall complete a Phase I survey including use of the regional State Office of Historic Preservation or the California Native American Heritage Commission's list of sacred and traditional sites. Routine and Ongoing Agricultural Activities shall be exempted from this policy in so far as allowed by state or federal law.
  - **OS-6.4 –** Development proposed in low sensitivity zones are not required to have an archaeological survey unless there is specific additional information that suggests archaeological resources are present.
  - **OS-6.5 –** Policies and procedures shall be established that encourage development to avoid impacts to sensitive archaeological sites including:

    a. Designing or clustering development to avoid archaeological site deposits, historic sites and resources, and Native Californian cultural sites;
    b. Requiring dedication of permanent conservation easements where subdivisions and other developments can be planned to provide for such protective easements.

  - **OS-6.6 –** Efforts by historical, educational or other organizations to improve the public's recognition of the County's cultural heritage and the citizen's responsibilities for archaeological or cultural resource preservation shall be

encouraged. The County shall adopt a uniform set of guidelines to define Phase I, II, and III significance assessment and data recovery programs. Similar guidelines shall be created to set standards for requirements for consultation with Native Californian descendants to establish procedures for determining the presence or absence of sacred or traditional sites. These guidelines shall address monitoring requirements and participation in cultural resource data recovery programs.

### Native Californian Cultural Sites, Sacred Places, and Burial Sites

- **Goal OS-8:** Encourage the Conservation and Identification of the County's Native Californian Cultural Sites, Sacred Places, and Burial Sites.
  - **OS-8.1 –** Unique burial sites shall be identified and protected. All Native Californian cemeteries, burials, shrine sites, and sacred place locations shall be preserved in place to the greatest extent possible and as permitted by law. In cases where such sites and locations cannot be retained in place without modification, governing requirements in the Government Code, Health and Safety Code, California Environmental Quality Act and Native American Religious Freedom Act shall be taken into account in consulting with local Native Californian Tribal Groups with documented aboriginal ties to the study area and shall be carried out, as necessary, with the assistance and input of the California Native American Heritage Commission. Documentation of descent shall be based on Genealogical Proof Standards.
  - **OS-8.2 –** Information on the location and significance of the County's burial sites shall be compiled and used in the environmental and development review process. All such data sources shall be recorded with the State Office of Historic Preservation coincident with development review.
  - **OS-8.3 –** Development proposed at sites where known burials or human cemeteries are located shall in no case modify, disturb, excavate, or develop within such locations until all steps in compliance with CEQA, Native American Heritage Commission, Health and Safety Code and Government Code, and in accordance with any completed MOU with a local Tribe, have been completed. Routine and Ongoing Agricultural Activities are exempted from this policy in so far as allowed by state or federal law. In the case of any conflict of interpretation, state requirements for the protection of burial sites are applicable and shall be implemented in good faith.

- **OS-8.4 –** Policies and procedures shall be established that encourage development to avoid impacts to burial sites including:

    a. Designing or clustering development to avoid archaeological deposits that typically contain human remains and to avoid any known cemeteries or other concentrations of human remains;
    b. Requiring dedication of permanent conservation easements if subdivisions and other developments can be planned to provide for such protective easements;
    c. In all cases where human remains are identified through CEQA review, archaeological research, ethnohistoric research, inadvertent grading disturbance, or historic record research, the County shall consult with the designated "most likely descendants" as identified by any Memorandum of Understanding (MOU) adopted pursuant to Policy OS-8.7. In the event no MOU is executed, the Native American Heritage Commission shall be consulted to help determine the appropriate Tribal Group in that portion of the County where the burial remains are identified.

- **OS-8.5 –** Efforts by historical, educational or other organizations to improve the public's recognition of the County's cultural heritage and the citizen's responsibilities for burial site preservation shall be encouraged. The County shall establish a Native Californian Advisory Panel that could provide technical assistance to staff in determining how best to address monitoring and site treatment consistent with the policies in this General Plan. Decisions about human remains and heritage resources shall be made in consultation with Tribal representatives consistent with procedures established in Policy OS-8.1.
- **OS-8.6 –** Tribal representatives will be consulted, consistent with state preservation law, about the location of sacred places, ancestral sites, archaeological remains of village sites, burial and cemetery sites, and other significant cultural resources during the preparation of any General Plan amendment, Master Plan, Community Plan, or Specific Plan.
- **OS-8.7 –** While all interested Native Americans shall be encouraged to participate in the CEQA data review and evaluation stages of cultural resource policy implementation, the Ohlone/Coastanoan/Esselen Nation (OCEN) is a designated Most Likely Descendant group identified by the Native American Heritage Commission of the State of California. An Implementation Plan for this General Plan shall include, but not be limited to:

a. Designating OCEN as the clearinghouse group for the coordination of data recovery monitoring and the disposition of human remains in Monterey County.
b. Creating a Memorandum of Understanding adopted to implement California's Local Government Tribal Inter-Governmental Consultation Act (SB18) consistent with this General Plan.
c. Establishing a technical advisory committee pursuant to Policy OS-8.5 and consisting of appropriate Tribal representatives and qualified archaeologists.

#### 2.6.3.2 Preservation of Historic Resources (County Code Section 18.25 et seq.)

The Monterey County Code (County Code) includes provisions for the preservation of historic resources (County of Monterey 2009). It provides the review criteria and process in which resources are designated. The Code also includes guidance to property owners, appeal process, demolition of historic resources, fire and building code requirements, and the requirement to maintain in good repair a historic building or a structure within a historic district.

#### 2.6.3.3 Guidelines for Historic Assessments

The Guidelines for Historic Assessments provides the general requirements for the preparation of cultural reports so that environmental effects are evaluated in a consistent, objective manner (County of Monterey 2008b). In addition, it provides guidance on determining the significance of a resource, and is primarily for property specific evaluations.

### 2.6.4 Native American Traditional Cultural Properties

#### 2.6.4.1 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) provides a process for federal agencies and institutions that receive federal funds (including museums, universities, state agencies, and local governments) to repatriate or transfer from their collections certain Native American cultural items – human remains, funerary objects, sacred objects and objects of cultural patrimony – to lineal descendants, and to Indian Tribes, Alaska Native Corporations, and Native Hawaiian organizations. NAGPRA also provides a process for federal agencies to address new discoveries of Native American human remains, funerary objects, sacred objects and objects of cultural property intentionally excavated or inadvertently discovered on federal or Tribal lands. Those processes are detailed in 43 CFR 10.4. "New" discoveries are those events occurring after November 16, 1990, when NAGPRA was enacted. Consultation with Indian Tribes, Alaska Native Corporations, and Native Hawaiian organizations is a critical component for addressing identification, treatment, and disposition of Native American cultural items.

### 2.6.4.2 Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Also, potentially relevant to pre-contact archaeological sites is the category termed "Traditional Cultural Properties" in discussions of cultural resources management performed under federal auspices. According to Parker and King (1998), "traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include the following:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

A TCP, then, can be defined generally as one that is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history and (b) are important in maintaining the continuing cultural identity of the community.

### 2.6.4.3 California Native American Graves Protection and Repatriation Act

In 2001, the State Legislature passed AB 978, the California Native American Graves Protection and Repatriation Act of 2001 (CalNAGPRA), requiring all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate Tribes. The bill also created a Repatriation Oversight Commission with oversight authority. The intent of the legislation was to cover gaps in the federal NAGPRA specific to the State of California. After the Repatriation Oversight Commission remained unfunded for over a

decade, the NAHC was granted oversight authority. The NAHC was given more responsibilities in 2018 under AB 2836 and in 2021 under AB 275. AB 2836 requires the NAHC to provide technical assistance to the University of California in adopting policies and procedures adopted to expedite repatriation of remaining items in its possession. AB 275 requires the NAHC to maintain a list of California Indian Tribes and their state Aboriginal territories, adopt mediation procedures, and publish notices of completion of preliminary inventories and summaries on the Commission website. Pursuant to Section 8013(a) of the California Health and Safety Code, the NAHC maintains a list of all California Indian Tribes and their respective state Aboriginal territories for the purpose of the repatriation of Native American human remains and cultural items.

#### 2.6.4.4 Native American Historic Resource Protection Act

California PRC Sections 5097 et seq. codify the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal public lands. Section 5097.9 states that no public agency or private party on public property shall "interfere with the free expression or exercise of Native American Religion." The code further states that:

> No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine… except on a clear and convincing showing that the public interest and necessity so require. County and city lands are exempt from this provision, expect for parklands larger than 100 acres.

# Section 3 Methods

## 3.1 Survey Methods

The goal of this survey was to identify existing cultural resources through a desk top survey. Harris & Associates conducted a records search at the NWIC for information on known cultural resources within the project area of potential effects (APE). The records search included a review of all records for historic and pre-contact sites, and historic addresses. In addition, the NRHP, the California Register of Historical Resources, the Monterey County Historic Register, the Archaeological Resources Directory, and the Built Environment Resources Directory were reviewed. Harris also requested a Sacred Lands File (SLF) search from the NAHC and conducted Tribal outreach for information about the project site.

## 3.2 Native American Outreach

Harris contacted the NAHC for a SLF search to determine whether Sacred Lands are present within the project area. The NAHC provided a positive response to the SLF check and recommended that the list of Tribes provided be contacted for more information. The NAHC identified 22 Native American representatives as potentially having local knowledge of TCRs. All Tribal points of contact on the list provided by the NAHC were contacted by email and/or regular mail for any information they may have regarding Sacred Lands that may be present on the project area. To date, no responses have been received. Tribal outreach documentation is provided in Confidential Appendix C, Sacred Lands File Search and Tribal Outreach. The County is also conducting AB 52/Senate Bill (SB) 18 government-to-government consultation.

### 3.2.1 Government-to-Government Consultation

The County is also conducting AB 52 and SB 18 government-to-government consultation. The County sent notification of SB 18 consultation on December 1, 2022, and notification of AB 52 consultation on October 30, 2024. County staff have met with the Esselen Tribe of Monterey County, Ohlone Costanoan Esselen Nation, and Indian Canyon Band of Costanoan to discuss the project.

The County consulted with the Esselen Tribe of Monterey County on February 17, 2023, as part of SB 18 consultation. The County re-engaged the Esselen Tribe of Monterey County for additional consultation as part of SB 18 and AB 52 on February 4, 2026 due to subsequent updates to the Opportunity Sites inventory. During consultation, the Esselen Tribe of Monterey County identified and requested:

- Consultation for large development projects for subdivisions that may be located in areas of cultural significance.
- For staff to recognize that the County works with outdated maps of Tribal resource areas. They request to work with the County to identify sensitive areas for potentially

uncovering cultural resources at parcels in the Sites Inventory for the Housing Element Sixth Cycle (2023–2031) update of the General Plan and contribute to development of policies and programs for staff consideration.

- Requested notification on the development of Site 52 through AB 52 and that as many protective measures be in place for development of the site as possible.
- That projects proposed in areas sensitive for cultural significance to Native Tribes indigenous to the land be provided an opportunity for consultation under CEQA and pursuant to state law (AB 52).
- That streamlined permits accommodate residential construction for anticipated generational growth.

County staff did not receive a request for AB 52 consultation from the Esselen Tribe of Monterey County, but followed up with a notice of closing the window of opportunity for consultation as a gesture of goodwill in continued collaboration.

The County consulted with the Ohlone Costanoan Esselen Nation on March 1, 2023, as part of SB 18 consultation and on November 12, 2024, as part of AB 52 consultation. The County also received a letter from Ohlone Costanoan Esselen Nation during the initial public review process for the County's Sites Inventory requesting that the County not include portions of Opportunity Site 52 due to the presence of "culturally significant" areas on the site.

The County re-engaged the Ohlone Costanoan Esselen Nation for additional consultation as part of SB 18 and AB 52 on June 2, 2026 due to subsequent updates to the Sites Inventory. During consultation, the Ohlone Costanoan Esselen Nation identified and requested:

- To see in the General Plan that the Ohlone Tribe is notified of any ground disturbance in Monterey County and function as the monitor for any project monitoring requirement.
- Concerns with meaningful consultation. No decisions will be made, and discussion does not make a difference with what is written or what happens.

  The County HCD Director identified that policies need input from Tribes to comply with SB 18, and staff needs to present actions proposed by the Ohlone Tribe to County decision-makers who might be able to accept and approve the Tribe's most critical priority for implementation within state and local guidelines.
- No public map of Sacred Sites.
- To know the size and location of all ground disturbance in Monterey County and that none are along the Coast or the Salinas River.
- Not supportive of specific locations as they are areas of sensitive Tribal activity.
- Concerns about ministerial laws and approvals, specifically concerned with requirements for discoveries, and how to ensure that proper protections are in place.

- Contractors need to have training on resources to understand what is found.
- Not supportive of the development of Tarpy Flats due to cultural sensitivity of the site. Hiss Parcel Project directly adjoins the site and was acquired by Big Sur Land Trust for preservation of wildlife habitat and cultural values for the Ohlone Costanoan-Esselen Nation.
- Concerns related to ministerial approval process for future development projects and Tribal notification.

Outside of consultation, comments were received from the Indian Canyon Band of Costanoan when the project was presented to the Airport Land Use Commission. The Indian Canyon Band of Costanoan requested consultation, preparation of educational materials, and monitoring. As requested, the County met with the Tribe on July 9, 2026. During the meeting, the Indian Canyon Mutsun Band of Costanoan identified and requested:

- Cultural sensitivity and awareness training for construction workers that have the potential to unearth Tribal resources.
- Provision of Tribal cultural monitoring for sites with archaeological and Tribal cultural sensitivity.
- Incorporation of educational materials and opportunities in project design for projects of value to Tribal nations (i.e. murals, informational placards).
- Provision of Tribal easements where possible to allow for Tribal nations to access lands of Tribal value.

### 3.2.2 Native American and Archaeological Resources Technical Panel

The Native American and Archaeological Resources Technical Panel is an additional forum for engagement with Native Tribes. In addition to meeting with Tribes, the County provided a presentation of the early Draft Sites Inventory on May 4, 2023, and provided a Housing Element status update on October 31, 2024, to the Native American and Archaeological Resources Technical Panel.

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## Section 4 Report of Findings

The records search at the NWIC identified a total of 208 previously conducted cultural studies within the project area (Confidential Appendix B, CHRIS Background Data). The records search indicated that a total of 29 resources (six pre-contact, 22 historic, and one multi-component) were recorded within the project area (Table 1). Each previously recorded resource included one or more resource descriptions, which provides an overview as to the resource type or cultural elements that are present. Each resource is given a resource code, which is assigned by the Office of Historic Preservation to aid in the recordation of resources using DPR forms.

**Table 1. Previously Recorded Cultural Resources within the Project Area**

| Primary Number | Trinomial | Chronological Placement | Site Type | Recorder, Date, Comments |
|---|---|---|---|---|
| P-27-000090 | CA-MNT-001801H | Historic | Airport Hangar<br>Structural Remains | • T.Wake, W.McCormack, S.Copeland, D.Greene, C.Rice, and W. & L. Shapiro (BioSystems Analysis, Inc.) 1993 |
| P-27-000138 | CA-MNT-000002 | Pre-Contact | Habitation | • Sarah Brewer & Scott Miller 2019<br>• Mary Gerbic & Alex DeGeorgey 2013<br>• William Roop 1982<br>• Stafford, William Roop, Gary Berg & Kathy Flynn 1975<br>• A.R. Pilling 1948 |
| P-27-000158 | CA-MNT-000022 | Pre-Contact | Game Field | A.R. Pilling & Ann Fisher 1948 |
| P-27-000385 | CA-MNT-000280 | Pre-Contact | Habitation | • Phil Kaijankoski 2020<br>• Eleni Ziogas 2019<br>• Sarah Brewer & Scott Miller 2019<br>• A.R. Pilling 1950 |
| P-27-001021 | CA-MNT-000965 | Pre-Contact | Lithic Scatter<br>Groundstone | • Gary Breschini & Trudy Harvest 1986<br>• Trudy Haversat & Gary Breschini 1979 |
| P-27-002721 | N/A | Historic | Fort Ord – Mess Halls<br>Buildings 27, 29-38 | Jody R. Stock 2006 |
| P-27-002722 | N/A | Historic | Fort Ord – Lavatory Buildings<br>Buildings 74-83 | Jody R. Stock 2006 |
| P-27-002733 | N/A | Historic | Fort Ord<br>Building T-23 | Jody R. Stock 2003 |
| P-27-002734 | N/A | Historic | Fort Ord<br>Building T-24 | Jody R. Stock 2003 |
| P-27-002737 | N/A | Historic | Fort Ord – Recreation Buildings<br>Buildings T-85, T-90, T-100, T-106 | Jody R. Stock 2003 |

| Primary Number | Trinomial | Chronological Placement | Site Type | Recorder, Date, Comments |
|---|---|---|---|---|
| P-27-002738 | N/A | Historic | Fort Ord – Recreation Buildings<br>T-87, T-97 | Jody R. Stock 2003 |
| P-27-002740 | N/A | Historic | Fort Ord – Post Office<br>Building T-101 | Jody R. Stock 2003 |
| P-27-002741 | N/A | Historic | Fort Ord<br>Building T-104 | Jody R. Stock 2003 |
| P-27-002742 | N/A | Historic | Fort Ord – Firehouse<br>Building T-105 | Jody R. Stock 2003 |
| P-27-002743 | N/A | Historic | Fort Ord – Warehouse<br>Building T-120 | Jody R. Stock 2003 |
| P-27-002744 | N/A | Historic | Fort Ord – Warehouse<br>Building T-121 | Jody R. Stock 2003 |
| P-27-002747 | N/A | Historic | Fort Ord – Warehouse<br>Building T-132 | Jody R. Stock 2003 |
| P-27-002749 | N/A | Historic | Fort Ord – Auto Shop,<br>Feature EGP-3,<br>Building T-138, T-140 | • Jody R. Stock 2003<br>• Ian Alexander, Juan Cervantes, Matthew Clark 2005, 2007 |
| P-27-002900 | CA-MNT-002257 | Pre-Contact | Mortar Bowl Rim Fragment<br>Artifact Scatter | Patrick H. Cave 2008 |
| P-27-002912 | N/A | Historic | Fort Ord – Detention Pond with Gauging Station<br>Feature EPG-1 | Ian Alexander, Juan Cervantes, Matthew Clark 2005 & 2007 |
| P-27-003666 | N/A | Pre-Contact | Ground Stone | Gail Bellenger 2018 |
| P-27-004056 | N/A | Multi-Component | Carmel River/Esselen Trail | McCarthy 1999 |
| P-27-004178 | N/A | Historic | Pajaro River Levee | David Hickman 2021 |
| P-27-004242 | N/A | Historic | Ranch-style Residence<br>11150 Merritt Street | Steven J. Melvin, Bryan Larson, & Joseph Freeman 2019 |
| P-27-004243 | N/A | Historic | Ranch-style Residence<br>11100 Merritt Street | Steven J. Melvin, Bryan Larson, & Joseph Freeman 2019 |
| P-27-004246 | N/A | Historic | Ranch-style Residence<br>11098 Merritt Street | Steven J. Melvin, Bryan Larson, & Joseph Freeman 2019 & 2020 |
| P-27-004251 | N/A | Historic | Folk Victorian Residence<br>11040 Merritt Street | Steven J. Melvin, Bryan Larson, & Joseph Freeman 2019 |
| P-27-004252 | N/A | Historic | Residence<br>11020 Merritt Street | Steven J. Melvin, Bryan Larson, & Joseph Freeman 2019 |
| P-27-004262 | N/A | Historic | Rancho Canada Golf Club | James Williams 2018 |

Of the six pre-contact resources, two are habitation sites, one is a Native American game field, two include artifact scatters, and one includes the recovery of a mortar bowl rim fragment and an artifact scatter. The 22 historic resources include structural remains of an airport hangar; 45 Fort Ord buildings, structures, and features; one levee; five single-family residences; and one golf course. One multi-component site was identified that consisted of a historic/Native American trail.

In addition, to the NWIC records search, the County of Monterey Historic Resources Register was also reviewed. A total of 25 historic resources were identified. The Berwick Manor and Orchard, the Porter Vallejo Mansion, and the Castroville Japanese Language School are listed on both the National Register and Local Register. In addition, Carmel Valley Airport is listed on the California Register and Local Register. One resource, the Meadows House had a designation of "unknown," and the Old Carmelo School had a designation of "potentially eligible for listing."

## 4.1 National Register of Historic Places

The NRHP was established by the NHPA of 1966 as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A review of the NRHP indicated that three resources are present within the project area, the Berwick Manor and Orchard, the Porter Vallejo Mansion, and the Castroville Japanese Language School. However, a review of the DPR forms identified that pre-contact site P-27-003666, multi-component site P-27-004056 (Carmel River/Esselen Trail), and the majority of Fort Ord buildings and structures (P-27-002721, P-27-002722, P-27-002733, P-27-002734, P-27-002737, P-27-002738, P-27-002740, P-27-002741, P-27-002742, P-27-002743, P-27-002744, are P-27-002747) are eligible for listing to the NRHP (Table 2, Cultural Resources Eligible or Listed on the NRHP, CRHR, or Local Register within the Project Area). One resource, P-27-004056, is outside of the project area.

**Table 2. Cultural Resources Located within Project Area**

| Primary Number/Trinomial | Chronological Placement | Resource Name/ Description/Location | Significance NRHP, CRHR, Local Register Eligible or Listed |
|---|---|---|---|
| P-27-000138/ CA-MNT-000002 | Pre-Contact | Bedrock Milling/Pestles<br>Fort Ord Master Plan<br>Toro Area Plan | Not eligible for listing |
| P-27-000158/ CA-MNT-000022 | Pre-Contact | Habitation Site<br>Game Field<br>Carmel Valley Master Plan | Unknown – Not evaluated |
| P-27-000385/ CA-MNT-000280 | Pre-Contact | Occupation Site<br>Fort Ord Master Plan<br>Greater Monterey Peninsula Area Plan | Unknown – Not evaluated |
| P-27-002721/N/A | Historic | Fort Ord – Mess Halls<br>Buildings 27, 29-38<br>Fort Ord Master Plan | Appears eligible as a contributor to a fully documented district. (3D)* |
| P-27-002722/N/A | Historic | Fort Ord – Lavatory Buildings<br>Buildings 74-83<br>Fort Ord Master Plan | Appears eligible as a contributor to a fully documented district. (3D)* |
| P-27-002733/N/A | Historic | Fort Ord<br>Building T-23<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002734/N/A | Historic | Fort Ord<br>Building T-24<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002737/N/A | Historic | Fort Ord – Recreation Buildings<br>Buildings T-85, T-90, T-100, T-106<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002738/N/A | Historic | Fort Ord – Recreation Buildings<br>T-87, T-97<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002740/N/A | Historic | Fort Ord – Post Office<br>Building T-101<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002741/N/A | Historic | Fort Ord<br>Building T-104<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002742/N/A | Historic | Fort Ord – Firehouse<br>Building T-105<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002743/N/A | Historic | Fort Ord – Warehouse<br>Building T-120<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |

| Primary Number/Trinomial | Chronological Placement | Resource Name/ Description/Location | Significance NRHP, CRHR, Local Register Eligible or Listed |
|---|---|---|---|
| P-27-002744/N/A | Historic | Fort Ord – Warehouse<br>Building T-121<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-002747/N/A | Historic | Fort Ord – Warehouse<br>Building T-132<br>Fort Ord Master Plan | May be eligible for NRHP if it contributes to a District that has not been documented. (4X)* |
| P-27-003666/N/A | Pre-Contact | Ground Stone<br>Carmel Valley Master Plan | Eligible for Listing to the CRHR & NRHP** |
| N/A | Historic | Door House<br>24814 Pescadero Road<br>Carmel Area Land Use Plan | Listed on the Local Register |
| N/A | Historic | Hatton Dairy Barn<br>6540 Carmel Valley Road<br>Carmel Valley Master Plan | Listed on the Local Register |
| N/A | Historic | Meadows Home<br>Carmel Valley Master Plan | Unknown |
| N/A | Historic | Chalk Rock House<br>27200 Los Arboles Drive<br>Carmel Valley Master Plan | Listed on the Local Register |
| N/A | Historic | Old Carmelo School<br>Carmel Valley Master Plan | Potentially eligible for listing |
| N/A | Historic | Berwick Manor & Orchard<br>Carmel Valley Master Plan | Listed on the National Register and Local Register |
| N/A | Historic | Carmel Valley Rock & Sand Co.<br>Carmel Valley Master Plan | Listed on the Local Register |
| N/A | Historic | Farm Center<br>Carmel Valley Master Plan | Listed on the Local Register |
| N/A | Historic | Del Monte Milk Barn<br>Carmel Valley Master Plan | Listed on the Local Register |
| N/A | Historic | Carmel Valley Airport<br>25790 Carmel Knolls Drive<br>Carmel Valley Master Plan | Listed on the California Register and Local Register |
| N/A | Historic | Edward Phinet House<br>100 Salinas Road<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Valley View Hotel<br>540 Salinas Road<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Residence (Chinatown)<br>22 Brooklyn Street<br>North County Inland Area Plan | Listed on the Local Register |

| Primary Number/Trinomial | Chronological Placement | Resource Name/ Description/Location | Significance NRHP, CRHR, Local Register Eligible or Listed |
|---|---|---|---|
| N/A | Historic | Residence (Chinatown)<br>26 Brooklyn Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Old Pajaro School<br>430 Salinas Road<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Porter Vallejo Mansion<br>29 Bishop Street<br>North County Inland Area Plan | Listed on the National Register and Local Register |
| N/A | Historic | Old Chinese School<br>18 Brooklyn Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Prunedale Senior Citizens Center<br>8300 Prunedale North Road<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | J.B. Rogers-Cooper House<br>10599 Merritt Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | First Private School<br>10780 McDougal Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Juan Bautista Castro House<br>10801 Merritt Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Castroville Japanese Language School<br>11199 Geil Street<br>North County Inland Area Plan | Listed on the National Register and Local Register |
| N/A | Historic | Castroville School<br>10700 Merritt Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Commercial Building<br>10685 Merritt Street<br>North County Inland Area Plan | Listed on the Local Register |
| N/A | Historic | Native Sons of the Golden West<br>10701 Merritt Street<br>North County Inland Area Plan | Listed on the Local Register |

**Notes:**

*2003 NRHP Status Codes used to describe. NRHP Status Codes were updated in 2020.

** No NRHP Code provided.

## 4.2 California Register of Historical Resources

The CRHR, maintained by the Office of Historic Preservation, includes historic and pre-contact resources that have been evaluated and determined to be significant under CEQA. The CRHR provides information, organized by County, regarding resources that have been processed through the Office of Historic Preservation (OHP). A review of the CRHR indicated that one resource is listed, Carmel Valley Airport that is present within the project. Resources that are eligible at the state level would also be eligible at the local level.

## 4.3 Monterey County Register of Historic Resources

The Monterey County Register of Historic Resources (local register) is maintained by the County and is the official inventory of buildings, structures, and areas designated by the County Board of Supervisors. A review of the local register indicates that 25 resources are present within the project area.

Table 2 identifies resources and their significance that are located within the opportunity and pipeline sites. For a full listing of the local register, see Appendix D. Any projects that contain any resources identified on the local register would require additional analysis.

The project is separated into three levels of cultural sensitivity—low, moderate, and high—based on the archival research, the NAHC SLF records search, regional environmental factors, and historic and modern development (Figure 5, Cultural Sensitivity for Monterey County, and Figures 5a–5i).

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# Section 5 Potential Impacts to Cultural Resources

Potential impacts to cultural resources are addressed in this section. The General Plan does not address specific projects proposed by the County; therefore, impacts are described generally. Four main impacts to cultural resources may occur through the implementation of the project, including (1) the destruction or adverse change to built resources, including adverse changes in the elements of historical structures, buildings, features, districts, or landscapes that make them significant resources; (2) the destruction of known or unknown pre-contact and historical archaeological resources; (3) the potential to disturb Native American human remains; and (4) the destruction or adverse changes to TCRs. Impacts for each are discussed below.

## 5.1 Historical Resources

The record searches and research identified historical (built) resources within the project. Under CEQA, any project that causes a substantial adverse in the significance of a historical resource would have a significant effect on the environment. Substantial adverse changes to the significance of a historical resource is defined as the physical demolition, destruction, alteration, or relocation of the resource or its immediate surroundings such that its significance would be materially impaired.

Historical resources within the project consist of structural remains of an airplane hangar, Fort Ord buildings, structures, and features, a levee, single-family residences, a golf course, and a multi-component trail. It is unknown how many parcels contain buildings or structures which were constructed prior to 1975 (and therefore are at least 50 years old), or built environmental resources which may meet the age threshold for eligibility when the project is implemented. Future development will likely occur in areas that may contain significant historical structures, buildings, features, or districts. As such, the potential exists for significant impacts to occur as a result of implementation of the project. All potential impacts are assumed to be significant for this analysis. Mitigation Measures CULT-1, CULT-2, CULT-5, and CULT-6 are recommended to minimize the potential for adverse effects to historical (built) resources. Projects that follow the Secretary of the Interior's Standards for the Treatments of Historic Properties are typically mitigated below the level of significance.

Based on the status of the resources within the project qualifying as significant historical resources, a site-specific analysis would be required when subsequent projects are proposed. Unevaluated historical resources may require research and evaluation to determine their eligibility for inclusion in the CRHR or NRHP. As such, individual projects may potentially cause a substantial adverse change in the significance of a historical resource and result in a potentially significant impact.

## 5.2 Archaeological Resources

The record searches and research identified pre-contact and historical archaeological sites within the project area. Based on the background search and research, it is known that the project area was used by pre-contact and historic peoples. As such, additional unrecorded archaeological resources may be present within the project. Under CEQA, archaeological resources may meet the definition of a historical resource or unique archaeological resource. As such, a project that causes a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5 of the CEQA Guidelines is considered a potentially significant impact. An adverse impact includes the destruction or disturbance of a significant archaeological site or any portion of an archaeological site that contains or has the potential to contain information important to history or prehistory.

Based on the status of the resources within the project qualifying as significant archaeological resources, a site-specific analysis would be required when subsequent projects are proposed. Unevaluated cultural resources may require research, evaluation, or testing programs to determine their eligibility for inclusion in the CRHR or NRHP. In addition, project improvements would have the potential to encounter unrecorded cultural resources. Furthermore, ground-disturbing activities such as clearing, trenching, and grading, have the potential to damage or destroy archaeological resources that may be present on or below the ground surface. Adverse effects to known significant or unique archaeological resources may result in a loss of valuable information that could be gained from the resources or prevent potentially eligible sites from being listed on a register of cultural resources. All potential impacts are assumed to be significant for this analysis. In order to reduce the potential for direct impacts from damage and disturbance to archaeological resources, Mitigation Measures CULT-1, CULT-2, CULT-3, and CULT-4 are recommended. Indirect impacts could also occur with implementation of the project. Specifically, increased accessibility to archaeological resources could lead to resource looting or vandalism activities. This is considered a significant impact. Mitigation Measures CULT-1, CULT-2, CULT-3, and CULT-4 are recommended to mitigate this potential indirect impact.

## 5.3 Human Remains

Based on the records search and research, human remains were not identified within the project. However, there is the potential for the presence of unidentified human remains during project implementation. CEQA assigns special importance to human remains and establishes procedures to be used when Native American remains are discovered. Excavation activities are required to be stopped whenever human remains are uncovered, and the County Coroner is to be contacted to assess the remains. If the County Coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the property owner or the individual responsible for the excavation work must consult with the appropriate Native

Americans to develop a culturally appropriate means of treating the remains. Ground disturbance associated with the implementation of the project could have the potential to disturb or destroy Native American human remains, including those interred outside of formal cemeteries. Mitigation Measures CULT-1, CULT-2, CULT-3, and CULT-4 are recommended to reduce potential impacts to the unexpected discovery of human remains.

## 5.4 Tribal Cultural Resources

Harris contacted the NAHC for a SLF search to determine whether Sacred Lands are present within the project. The NAHC provided a positive response to the SLF Search and recommended that the list of Tribes provided be contacted for more information. All Tribal points of contact on the list provided by the NAHC were contacted by email and/or regular mail for any information they may have regarding Sacred Lands that may be present on the project. To date, no responses have been received. Tribal outreach documentation is provided in Confidential Appendix C.

One resource was identified during the background search that is a TCR. The Carmel River/Esselen Trail (P-27-004056) within the project area is identified as a multi-component resource. It is described as the "Esselen trade trail that begins at the coast and follows the river into the back country" (Yanagi 2023). It was identified as a traditional place/TCP and contributor to the Xasáuan District. The resource was determined significant under Criterion A of the NRHP based on "knowledge that has been passed down orally through the generations reaching into the last century" (Yanagi 2023).

Implementation of the project would involve ground disturbing construction activities that could cause an adverse effect to significant known or unknown TCRs. Mitigation Measures CULT-1, CULT-2, CULT-3, and CULT-4 are recommended to mitigate impacts to TCRs. Indirect adverse effects may result from increased accessibility to TCRs that could lead to resource looting or vandalism activities. This is considered a significant impact. Mitigation Measures CULT-1, CULT-2, CULT-3, and CULT-4 are recommended to mitigate this potential indirect impact.

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# Section 6 Recommendations

## 6.1 Resource Management

As part of the 2010 General Plan (County of Monterey 2010), the County has already developed several goals and policies with the intent of identifying and preserving archaeological resources. Conservation and Open Space Element Goal OS-6 states, "Encourage the Conservation and Identification of the County's Archaeological Resources." The County developed six policies in support of Goal OS-6:

- **OS-6.1 –** Important representative and unique archaeological sites and features shall be identified and protected for all parcels with undisturbed natural conditions (i.e., ungraded properties), consistent with State Office of Historic Preservation guidelines and definitions employed on a statewide basis, including Phase I, II, and III studies.
- **OS-6.2 –** Information on the location and significance of the County's archaeological resources shall be compiled and used in the environmental and development review process. The County shall rely on and participate in the statewide inventory work of the California Native American Heritage Commission and the State Office of Historic Preservation. All Phase I, II, and III studies, and records of Native Californian consultation, shall be filed with appropriate state agencies and local Tribes as well as local data source compilations maintained by the County. The County shall work with local Tribes to update County GIS maps showing high, moderate, and low archaeological sensitivity areas.
- **OS-6.3 –** New development proposed within moderate or high sensitivity zones, or within 150 feet of a known recorded archaeological and/or cultural site, shall complete a Phase I survey including use of the regional State Office of Historic Preservation or the California Native American Heritage Commission's list of sacred and traditional sites. Routine and Ongoing Agricultural Activities shall be exempted from this policy in so far as allowed by state or federal law.
- **OS-6.4 –** Development proposed in low sensitivity zones are not required to have an archaeological survey unless there is specific additional information that suggests archaeological resources are present.
- **OS-6.5 –** Policies and procedures shall be established that encourage development to avoid impacts to sensitive archaeological sites including:

    a. Designing or clustering development to avoid archaeological site deposits, historic sites and resources, and Native Californian cultural sites;
    b. Requiring dedication of permanent conservation easements where subdivisions and other developments can be planned to provide for such protective easements.

- **OS-6.6 –** Efforts by historical, educational or other organizations to improve the public's recognition of the County's cultural heritage and the citizen's responsibilities for archaeological or cultural resource preservation shall be encouraged. The County shall adopt a uniform set of guidelines to define Phase I, II, and III significance assessment and data recovery programs. Similar guidelines shall be created to set standards for requirements for consultation with Native Californian descendants to establish procedures for determining the presence or absence of sacred or traditional sites. These guidelines shall address monitoring requirements and participation in cultural resource data recovery programs.

Similarly, the County has also developed several goals and policies with the intent of preserving and identifying Native Californian cultural sites, sacred places, and burial sites. The Conservation AND Open Space Element Goal OS-8 states, "Encourage the Conservation and Identification of the County's Native Californian Cultural Sites, Sacred Places, and Burial Sites." The County developed seven policies in support of Goal OS-8:

- **OS-8.1 –** Unique burial sites shall be identified and protected. All Native Californian cemeteries, burials, shrine sites, and sacred place locations shall be preserved in place to the greatest extent possible and as permitted by law. In cases where such sites and locations cannot be retained in place without modification, governing requirements in the Government Code, Health and Safety Code, California Environmental Quality Act and Native American Religious Freedom Act shall be taken into account in consulting with local Native Californian Tribal Groups with documented aboriginal ties to the study area and shall be carried out, as necessary, with the assistance and input of the California Native American Heritage Commission. Documentation of descent shall be based on Genealogical Proof Standards.
- **OS-8.2 –** Information on the location and significance of the County's burial sites shall be compiled and used in the environmental and development review process. All such data sources shall be recorded with the State Office of Historic Preservation coincident with development review.
- **OS-8.3 –** Development proposed at sites where known burials or human cemeteries are located shall in no case modify, disturb, excavate, or develop within such locations until all steps in compliance with CEQA, Native American Heritage Commission, Health and Safety Code and Government Code, and in accordance with any completed MOU with a local Tribe, have been completed. Routine and Ongoing Agricultural Activities are exempted from this policy in so far as allowed by state or federal law. In the case of any conflict of interpretation, state requirements for the protection of burial sites are applicable and shall be implemented in good faith.
- **OS-8.4 –** Policies and procedures shall be established that encourage development to avoid impacts to burial sites including:

a. Designing or clustering development to avoid archaeological deposits that typically contain human remains and to avoid any known cemeteries or other concentrations of human remains;
b. Requiring dedication of permanent conservation easements if subdivisions and other developments can be planned to provide for such protective easements;
c. In all cases where human remains are identified through CEQA review, archaeological research, ethnohistoric research, inadvertent grading disturbance, or historic record research, the County shall consult with the designated "most likely descendants" as identified by any Memorandum of Understanding (MOU) adopted pursuant to Policy OS-8.7. In the event no MOU is executed, the Native American Heritage Commission shall be consulted to help determine the appropriate Tribal Group in that portion of the County where the burial remains are identified.

- **OS-8.5 –** Efforts by historical, educational or other organizations to improve the public's recognition of the County's cultural heritage and the citizen's responsibilities for burial site preservation shall be encouraged. The County shall establish a Native Californian Advisory Panel that could provide technical assistance to staff in determining how best to address monitoring and site treatment consistent with the policies in this General Plan. Decisions about human remains and heritage resources shall be made in consultation with Tribal representatives consistent with procedures established in Policy OS-8.1.
- **OS-8.6 –** Tribal representatives will be consulted, consistent with state preservation law, about the location of sacred places, ancestral sites, archaeological remains of village sites, burial and cemetery sites, and other significant cultural resources during the preparation of any General Plan amendment, Master Plan, Community Plan, or Specific Plan.
- **OS-8.7 –** While all interested Native Americans shall be encouraged to participate in the CEQA data review and evaluation stages of cultural resource policy implementation, the Ohlone/Coastanoan/Esselen Nation (OCEN) is a designated Most Likely Descendant group identified by the Native American Heritage Commission of the State of California. An Implementation Plan for this General Plan shall include, but not be limited to:

  a. Designating OCEN as the clearinghouse group for the coordination of data recovery monitoring and the disposition of human remains in Monterey County.
  b. Creating a Memorandum of Understanding adopted to implement California's Local Government Tribal Inter-Governmental Consultation Act (SB18) consistent with this General Plan.
  c. Establishing a technical advisory committee pursuant to Policy OS-8.5 and consisting of appropriate Tribal representatives and qualified archaeologists.

Furthermore, the County Code Section 18.25 et seq. (Preservation of Historic Resources) includes provisions for the preservation of historic resources. It provides the review criteria and process in which resources are designated. The County Code also includes guidance to property owners, appeal process, demolition of historic resources, fire and building code requirements, the requirement to maintain in good repair a historic building or a structure within a historic district, and maintenance of the local register.

In addition to the County's current goals and policy, the following mitigation measures are recommended to reduce impacts to cultural resources which may be adversely affected by the implementation of the project. The recommended mitigation measures outline a series of assessments and actions, which provide guidance for evaluating potential impacts and incorporating appropriate measures to avoid, minimize, and/or mitigate impacts in compliance with CEQA.

## 6.2 Mitigation Measures

Implementation of the following recommended mitigation measures would reduce potentially significant impacts. The County is the lead agency implementing cultural resource mitigation measures.

**MM-CUL-OBJ-1: Historic Resources Assessment.** By-right residential developments streamlining under the Objective Process shall be required to prepare and submit a historic assessment as part of the development application for review by the County when a project has the potential to affect a building, site, objects, or structures over 50 years old. A Phase I Historic Assessment shall be prepared by a qualified historic consultant pursuant to the County of Monterey Guidelines for Historic Assessments. The Historic Assessment shall determine if a resource is historic by using criteria from the National Register of Historic Places, the California Register of Historical Resources, and Monterey County's Register of Historic Places. If it is determined that a resource is eligible for listing on one or more of these Registers, then a Phase II Assessment shall be prepared.

A Phase II Historic Assessment shall be prepared by a qualified historic consultant and shall provide a more detailed evaluation of the resource and examine how a project will affect its significance. If the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place is not feasible, then MM-CUL-OBJ-3 shall apply.

**MM-CUL-CONS-2: Historic Resource Assessment.** Applicants for developments streamlining under the Consistency Process shall be required to prepare and submit a historic assessment as part of the development application for review by the County when a project has the potential to affect a building, site, objects, or structures over 50 years old.

Refer to MM-CUL-OBJ-1 above for all standards and requirements for MM-CUL-CONS-2.

**MM CUL-OBJ-3: Historic Resources Protection.** By-right residential developments streamlining under the Objective Process shall be required to document, implement treatment measures, and incorporate interpretive measures if the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place of a built environment resource is not feasible. The required documentation shall be provided as part of the development application for review by the County, and shall include the following:

1. Implement documentation and treatment measures consistent with the Secretary of the Interior's Standards for Architectural and Engineering Documentation (Historic American Buildings Survey [HABS]/Historic American Engineering Record [HAER]/Historic American Landscape Survey [HALS]) prior to construction activities that would cause significant impacts. Documentation shall include:
    a. Photographic Recordation: Digital color photographs and large-format archival-quality photographs of the exterior and interior (where accessible) of the resource, including representative architectural features, spatial relationships, and character-defining details.
    b. Written Documentation: A written description of the resource's history, context, architecture, and significance, drawing upon available primary and secondary sources (e.g., Sanborn maps, building permits, census records, historical photographs, and prior evaluations).
    c. Measured Drawings (if appropriate): Scaled floor plans, elevations, and/or site plans prepared to HABS/HAER/HALS standards, if feasible and warranted by the resource's level of significance.
    d. Archival Curation: Documentation shall be compiled in a permanent archival-quality report and submitted to the appropriate local historical society, library, archives, and/or the California Historical Resources Information System regional information center for permanent curation and public accessibility.
2. In addition, where feasible, the project applicant or project proponent shall incorporate interpretive measures to commemorate the historical significance of the resource, such as public signage, exhibits, brochures, or web-based content.

**MM CUL-CONS-4: Historic Resources Protection.** Applicants for developments streamlining under the Consistency Process shall be required to document, implement treatment measures, and incorporate interpretive measures if the Phase I or II Historic Assessment identifies a significant historical resource(s), and if avoidance or preservation in place of a built

environment resource is not feasible. The required documentation shall be provided as part of the development application for review by the County.

Refer to MM-CUL-OBJ-3 above for all standards and requirements for MM-CUL-CONS-4.

**MM-CUL-OBJ-5: Archaeological and Tribal Cultural Resources Protection.** To comply with all relevant site-specific County regulations and policies, in areas with documented or inferred historical, archaeological, or Tribal Cultural Resources—such as areas of high, moderate, or low cultural sensitivity as identified on current County resource maps or in Table 4.5-1, Archaeological and Cultural Sensitivity for Opportunity Sites, of the Draft Program Environmental Impact Report—the project applicant or project proponent shall retain a qualified archaeologist to prepare an archaeological resources assessment report in accordance with professional standards as outlined in the Archaeological Resource Management Report Guidance (California 1990), as part of the development application package.

The Phase I, Phase II, and Phase III report requirements are as follows:

3. Phase I Inventory of Archaeological Resources: A Phase I Inventory of Archaeological Resources shall include, at a minimum, a records search of available resource information at the Northwest Information Center of the California Historic Resources Information System. This records search will, at a minimum, determine whether a part or all of the project area has been previously surveyed for archaeological resources, whether any known archaeological resources have already been recorded on or adjacent to the project area, and whether the probability is low, moderate, or high that archaeological resources are in the project area. Following the background research, a field survey by a professional archaeologist shall be conducted in accordance with accepted standards and practices. The field survey shall include, at a minimum, an inspection of the site for evidence of surface and, if appropriate, subsurface archaeological resources.
    a. If the Phase I Inventory of Archaeological Resources investigation reveals that the site does not contain archaeological resources, no further review is necessary unless otherwise noted by the archaeologist.
    b. If the Phase I Inventory of Archaeological Resources investigation reveals any information indicating that the site is likely to contain archaeological resources, a Phase II Evaluation of Archaeological Resources shall be required unless either of the following applies:
        i. There is substantial evidence, absent the Phase II Evaluation, that the project will have a significant impact on archaeological resources and

those impacts cannot be avoided, in which case a Phase III Plan may be prepared without a Phase II Evaluation; or

ii. If the location of resources can reasonably be determined based on the Phase I Inventory and all development is located to avoid impacts to those identified resources, no further archaeological reports are necessary if the conditions recommended by the archaeologist are applied to the project.

4. Phase II Evaluation of Archaeological Resources: A Phase II Evaluation shall be prepared with the goal of determining site boundaries, an evaluation of the site's significance pursuant to California Public Resources Code, Section 21083.2(g), and an evaluation of avoidance measures pursuant to Subsection E.1 of County Code, Section 21.66.050, if applicable. A Phase II Evaluation may include test excavations when adequate data from previous reports are not available to assess a site's significance; upon completion of testing and assessment of archaeological resources, , the archaeologist shall curate materials to an archival center in Monterey County or repatriate materials to a culturally affiliated Tribe, as appropriate. This does not relieve an owner or owner's representative from following the process mandated by law when human remains are involved.

   a. If no unique archaeological resources are found during the Phase II Evaluation, no further reports are necessary. Despite a negative finding in the Phase II Evaluation, conditions recommended by the archaeologist and the California Native American Tribe through the consultation process shall be applied to the project as appropriate.
   b. If the Phase II Evaluation of Archaeological Resources determines that unique archaeological resources may be present, the Phase II Evaluation shall include consideration of the avoidance measures required in the 2010 General Plan Open Space and Conservation Element Policy OS-6.5, North County Land Use Plan Key Policy 2.9.1 and General Policies 2.9.2, Carmel Area Land Use Plan Key Policy 2.8.2 and General Policies 2.8.3, and Subsection E.2 of County Code, Section 21.66.050. If significant resources cannot be avoided, a Phase III Data Recovery Plan shall be prepared.
   c. The 2010 General Plan Open Space and Conservation Element Policy OS-6.5, North County Land Use Plan Specific Policies 2.9.3, Carmel Area Land Use Plan Specific Policies 2.8.4, and Subsection E.2 of County Code, Section 21.66.050, indicates that mitigation based on a Data Recovery Plan (Phase III Plan) is allowed only upon a showing by the project applicant or project proponent, based on substantial evidence, that avoidance is not feasible. Prior to the Data Recovery Plan being accepted as complete by the County Director

of Housing and Community Development, evidence shall be submitted demonstrating that avoidance is not feasible.

5. Phase III Data Recovery Plan: A Phase III Data Recovery Plan shall evaluate a project's impacts on unique archaeological resources and shall set forth the reasons, based on substantial evidence, why avoidance measures required in Subsection E.2 of County Code, Section 21.66.050, are not feasible under the circumstances of the case. A Data Recovery Plan shall follow the Secretary of the Interior's Guidelines for Archeological Documentation. The Phase III Plan shall include treatment of archaeological resources with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including but not limited to the following:
    a. Protecting the cultural character and integrity of the resource;
    b. Protecting the traditional use of the resource; and
    c. Protecting the confidentiality of the resource.
6. Report Format and Standards:
    a. In all cases, written reports shall be prepared consistent with the report format requirements contained in the State Office of Historic Preservation Archaeological Resource Management Reports: Recommended Contents and Format guidelines. A single report may incorporate more than one Phase where appropriate to minimize redundancy and expense. All reports shall be filed with the appropriate state agencies.
    b. Submittal of the applicable report(s) to the County Director of Housing and Community Development shall be required prior to a project application being considered complete.
    c. The report(s) shall be prepared, at the project applicant or project proponent's expense, by a qualified archaeologist, either from the County's list of archaeological consultants or by a member of the Register of Professional Archaeologists who is familiar with California Central Coast archaeology. The project applicant or project proponent shall also be responsible for paying for the costs of data recovery and curation of recovered materials, if applicable.

**MM-CUL-CONS-6: Archaeological and Tribal Cultural Resources Protection.** Applicants for developments streamlining under the Consistency Process shall be required to submit an archaeological resource assessment as part of the development application for review by the County when a project has the potential to affect archaeological or Tribal Cultural Resources.

Refer to MM-CUL-OBJ-5 above for all standards and requirements for MM-CUL-CONS-6.

**MM-CUL-OBJ-7: Avoidance, Preservation, and Data Recovery.** To comply with all relevant site-specific County regulations and policies, if unique archaeological resources or Tribal Cultural Resources are identified, avoidance, preservation, and/or data recovery measures shall be implemented as outlined below.

1. Impacts to unique archaeological resources and Tribal Cultural Resources shall be avoided to the extent feasible. In all cases where unique archaeological resources or Tribal Cultural Resources are identified, the following avoidance measures shall be considered:
    a. Avoidance and preservation of the resources in place, including but not limited to, revising the project design or location to protect the resources and their natural context (e.g., through use of green spaces, parks, or other open space to incorporate the resources) with culturally appropriate protection and management criteria;
    b. Placing the area in a permanent conservation easement or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places;
    c. Limitation of public access; and
    d. Other feasible methods of avoidance and protection of the resource.
2. Mitigation based on a Data Recovery Plan (Phase III Plan) is allowed only upon demonstration by the project applicant or project proponent, based on substantial evidence, that avoidance is not feasible. Prior to the Data Recovery Plan being accepted as complete by the County Director of Housing and Community Development, evidence shall be submitted demonstrating that avoidance is not feasible.
3. The results of all data recovery activities shall be compiled into a final report. The final report shall be prepared by a qualified archaeologist and submitted to the County Director of Housing and Community Development for review and approval prior to final grading or building inspections.

**MM-CUL-CONS-8: Avoidance, Preservation, and Data Recovery.** Applicants for developments streamlining under the Consistency Process shall be required to implement avoidance, preservation, and/or data recovery measures if unique archaeological resources or Tribal Cultural Resources are identified.

Refer to MM-CUL-OBJ-7 above for all standards and requirements for MM-CUL-CONS-8.

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# Section 8 List of Preparers and Persons and Organizations Contacted

The following persons participated in the preparation of this report:

## Harris & Associates

| | |
|---|---|
| Donna Beddow, RPA | Principal Investigator |
| Elizabeth Kim | Senior Project Manager |

## Agencies/Individuals Contacted

Amah Mutsum Tribal Band
- Valentin Lopez, Chairperson
- Ed Ketchum – Vice-Chairperson

Amah-Mutsun Tribal Band of San Juan Bautista
- Shelby Brown, Senior Cultural Monitor and Councilwoman
- Garry Zimmer, Senior Cultural Monitor and Consultant
- Christopher Zimmer, Senior Cultural Monitor, Consultant, and Councilman
- Michelle Zimmer, Senior Cultural Monitor and Consultant
- Irene Zwierlein, Chairperson

Costanoan Ohlone Rumsen-Mutsen Tribe
- Patrick Orozco, Chairman

Costanoan Rumsen Carmel Tribe
- Samuel Rodriguez, Cultural Resource Officer
- Henry Munoz, Cultural Resource Officer
- Carla Munoz, Tribal Council

Esselen Tribe of Monterey County
- Susan Morley, Cultural Committee Chairwoman
- Tom Little Bear Nason, Tribal Chairman

Indian Canyon Mutsun Band of Costanoan
- Kanyon Sayers-Roods, MLD Contact
- Ann Marie Sayers, Chairperson

KaKoon Ta Ruk Band of Ohlone Costanoan Indians of the Big Sur Rancheria
- Isaac Bojorquez, Chairman
- Lydia Bojorquez, Vice-Chairperson

Ohlone/Costanoan-Esselen Nation
- Louise Miranda-Ramirez, Chairperson
- Christanne Najera, Vice-Chairperson

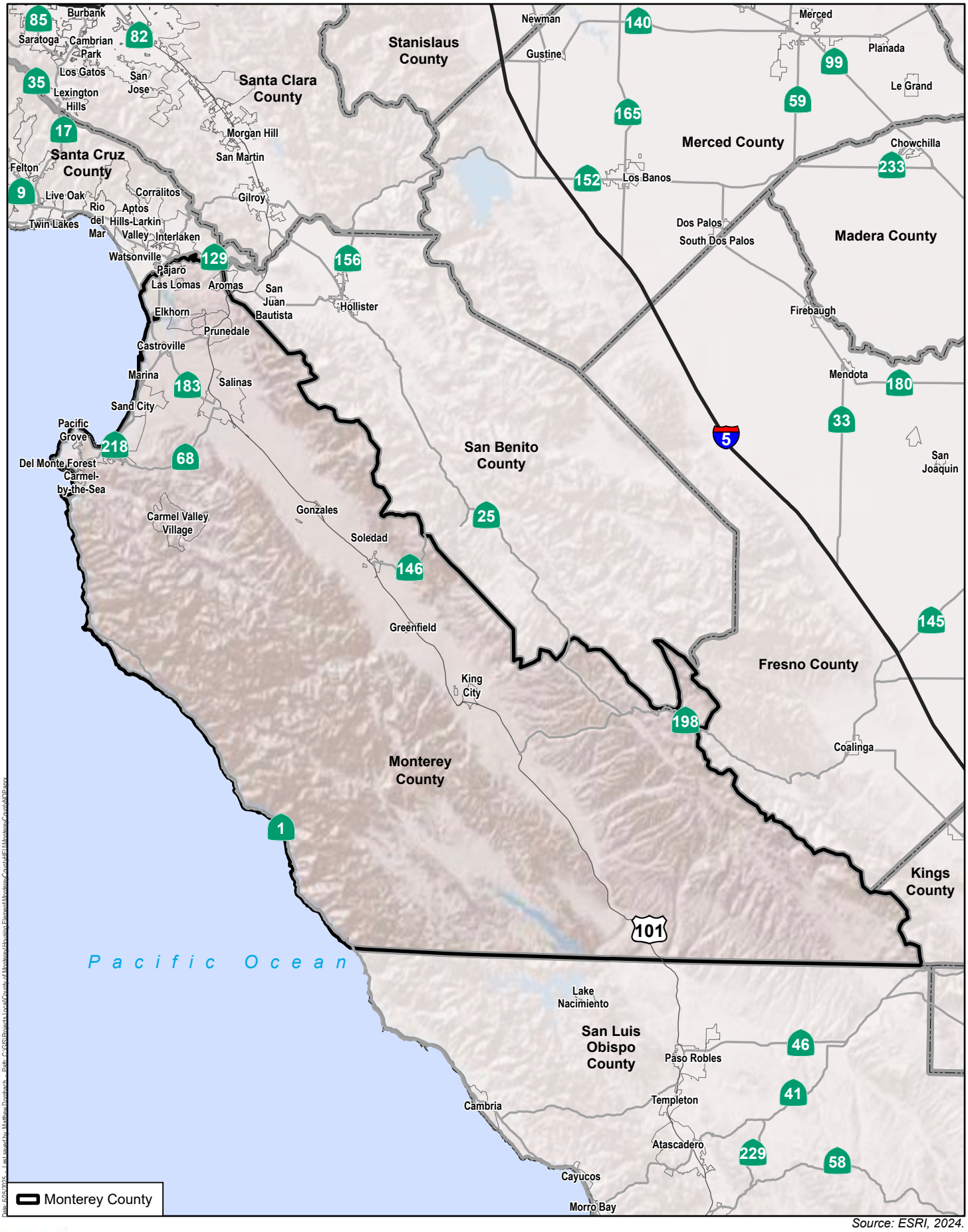
Rumsen An:a Tur:ataj Ohlone
- Dee Dee Ybarra, Chairperson
- Daniel Quiroga, Spiritual/Cultural Advisor

Wuksachi Indian Tribe/Eshom Valley Band
- Kenneth Woodrow, Chairperson

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# Appendix A. Figures

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*Source: ESRI, 2024.*

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**Figure 1**

Regional Location

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




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*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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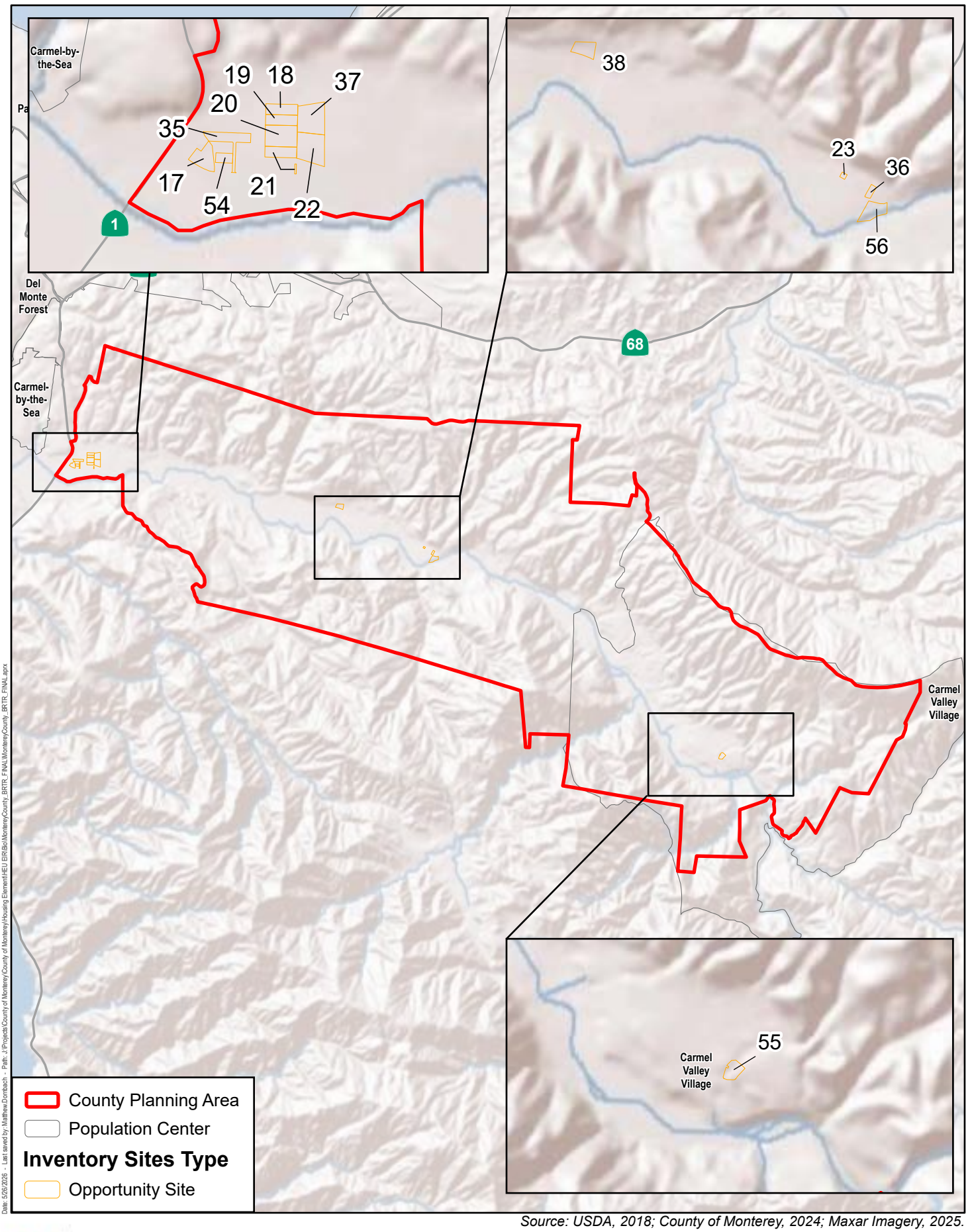
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**Figure 2a**

Project Location - Opportunity Sites in the Carmel Area Land Use Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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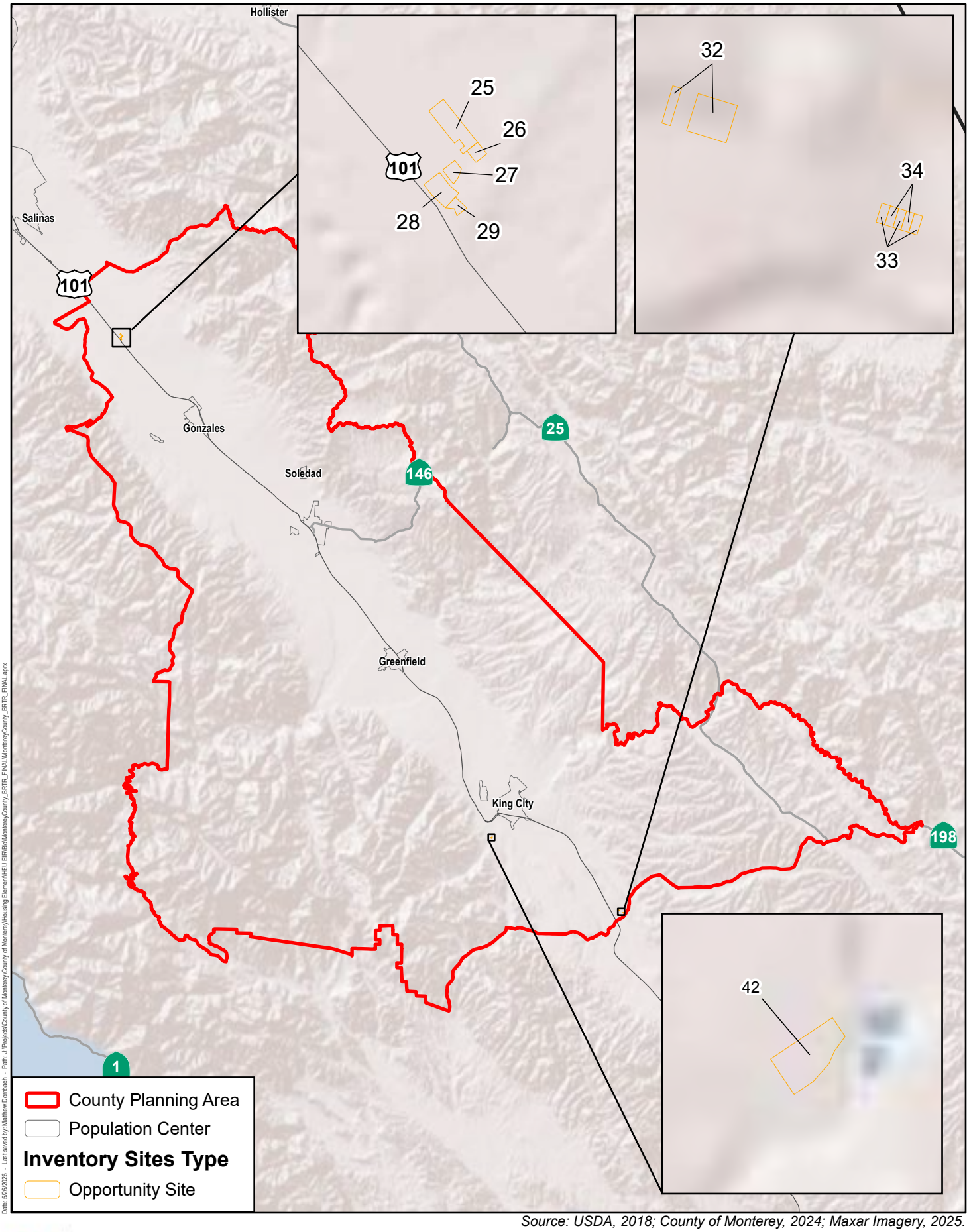
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**Figure 2b**

Project Location - Opportunity Sites in the Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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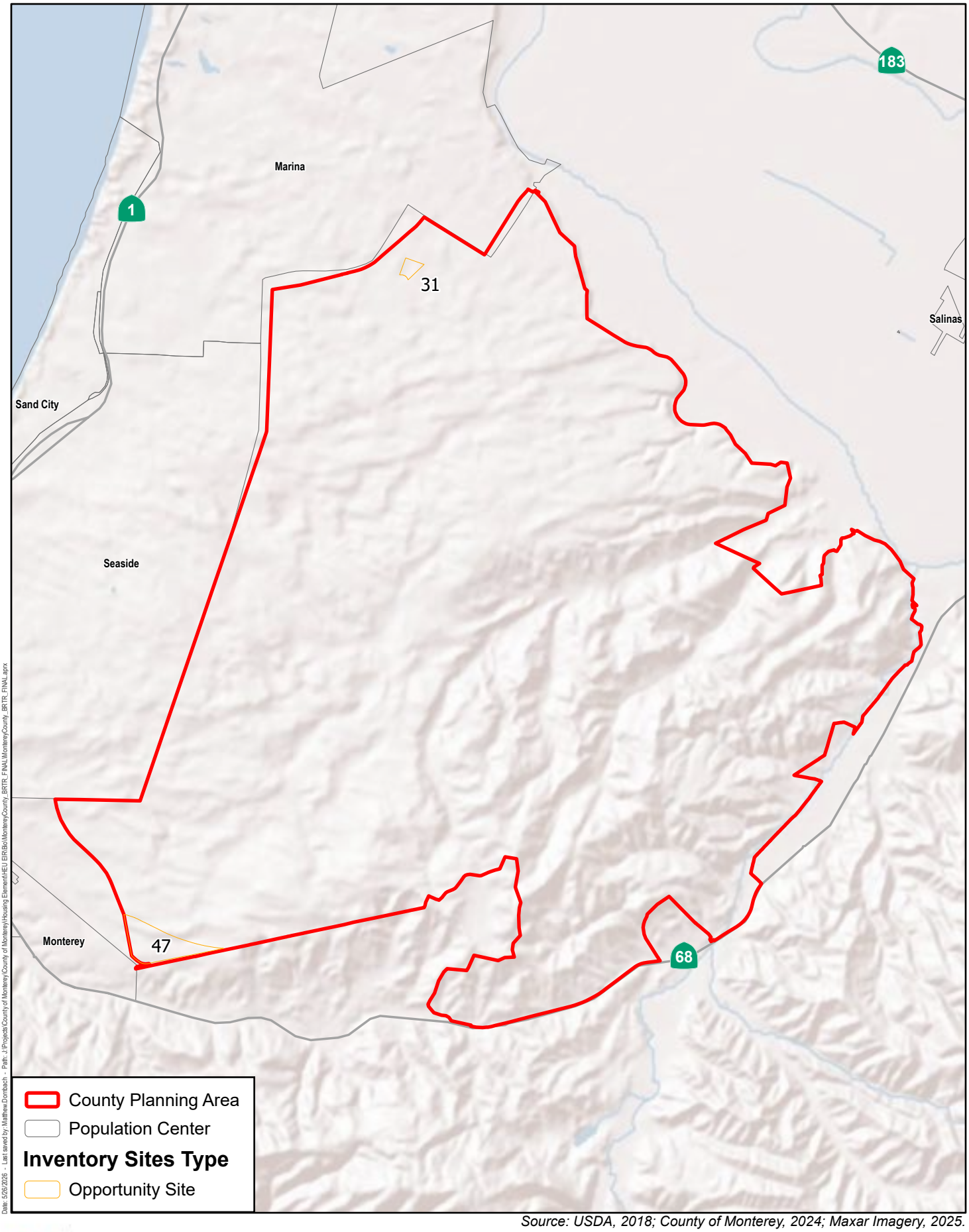
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**Figure 2c**

Project Location - Opportunity Sites in the Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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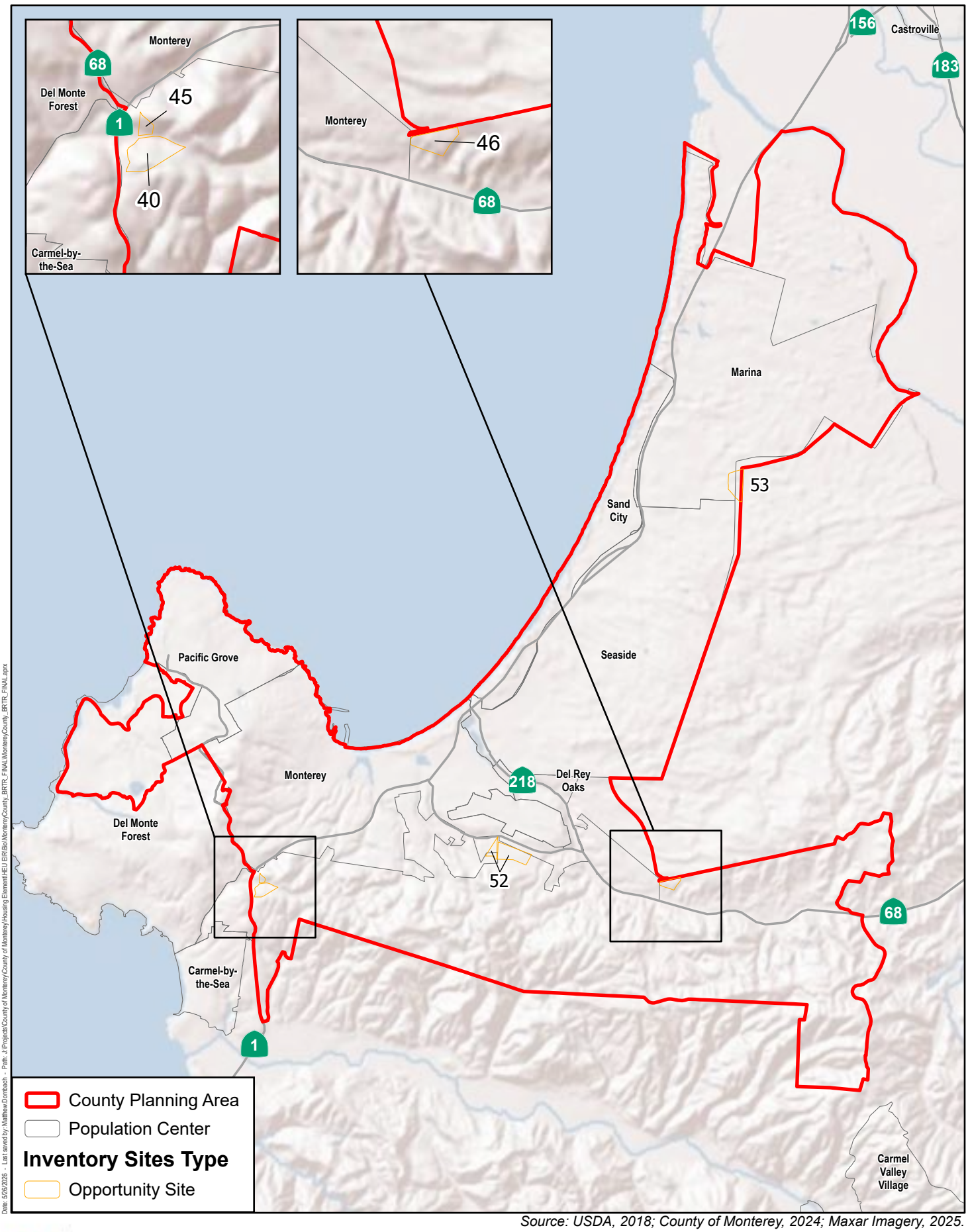
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**Figure 2d**

Project Location - Opportunity Sites in the Fort Ord Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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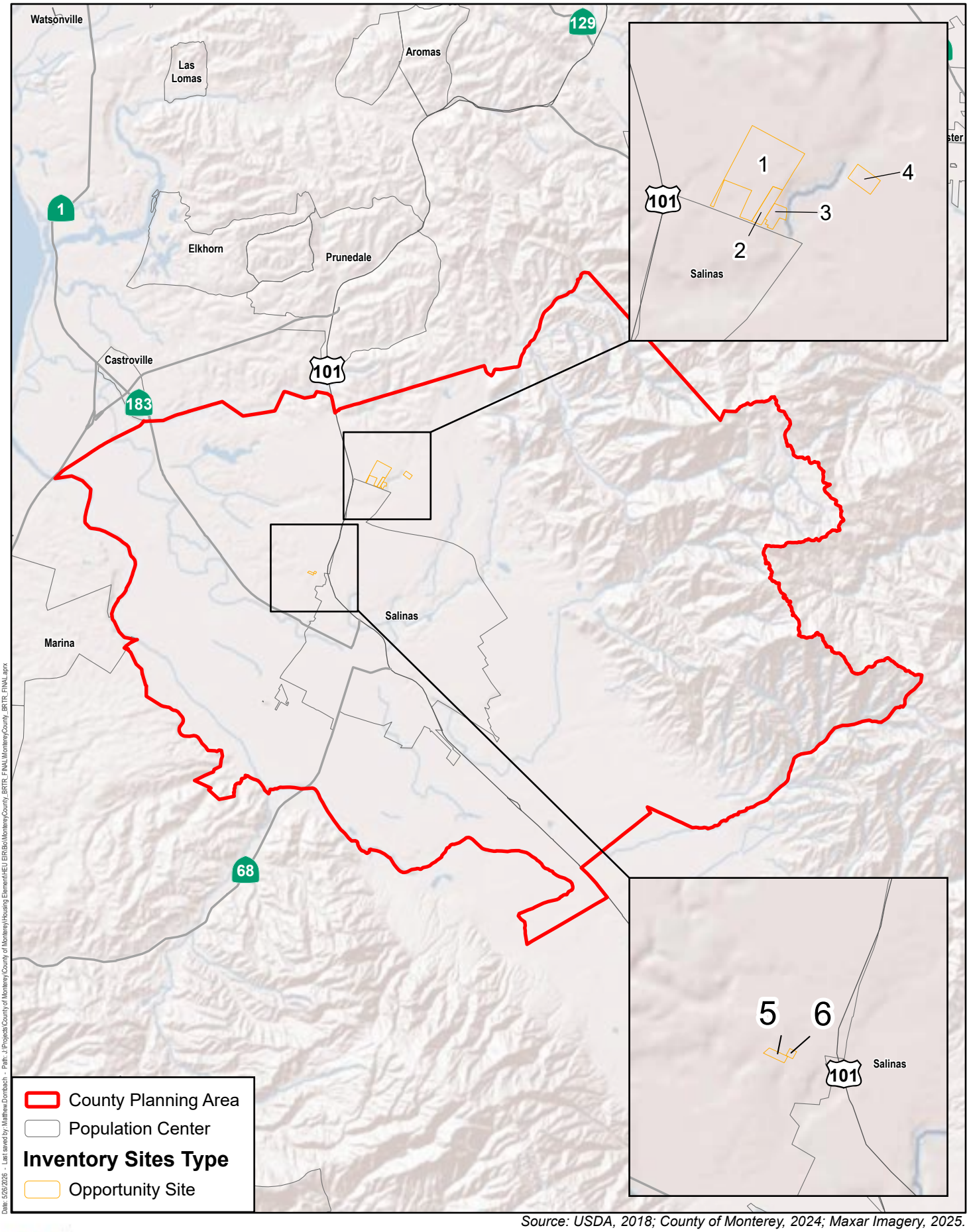
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**Figure 2e**

Project Location - Opportunity Sites in the Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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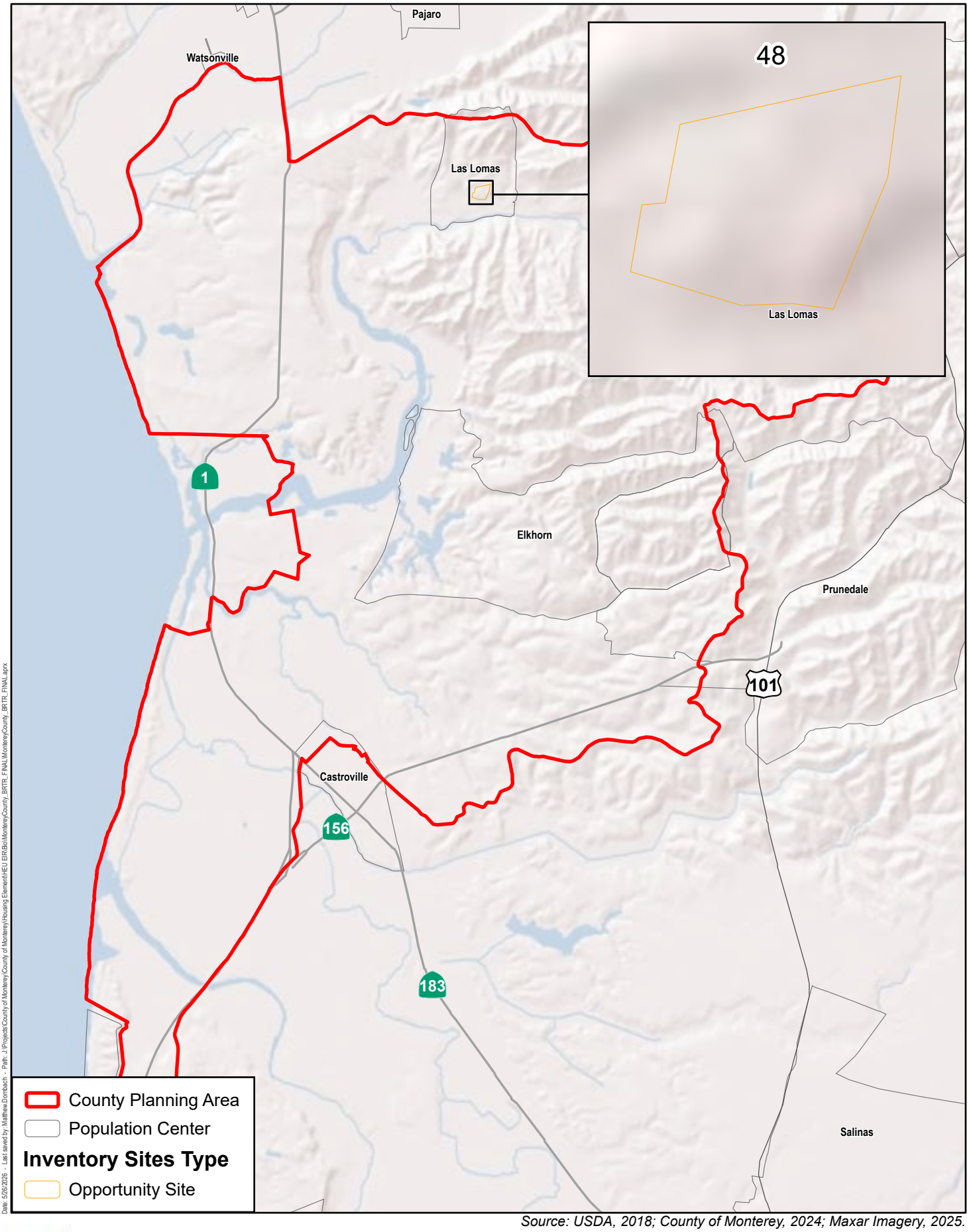
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**Figure 2f**

Project Location - Opportunity Sites in the Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.

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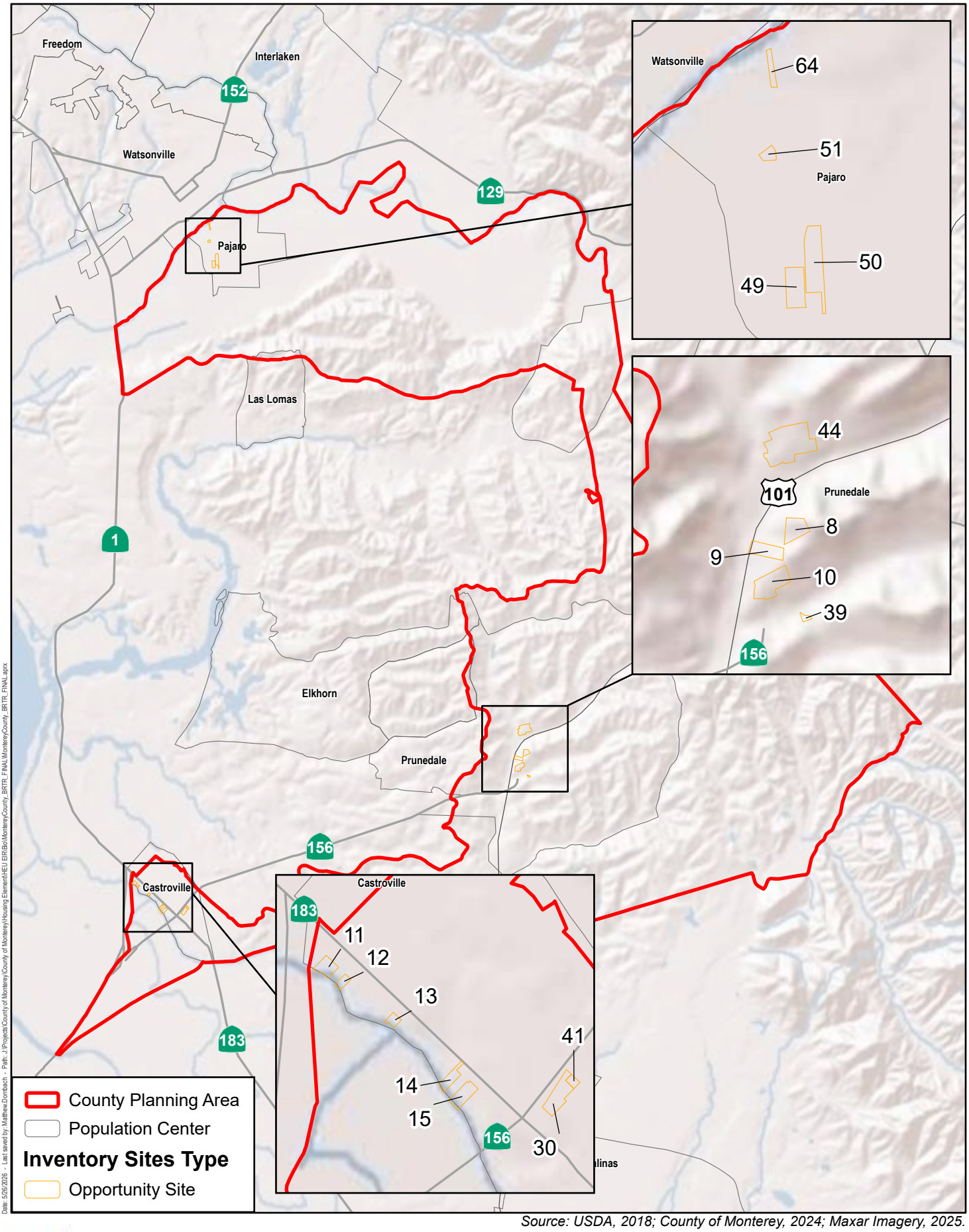
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**Figure 2g**

Project Location - Opportunity Sites in the North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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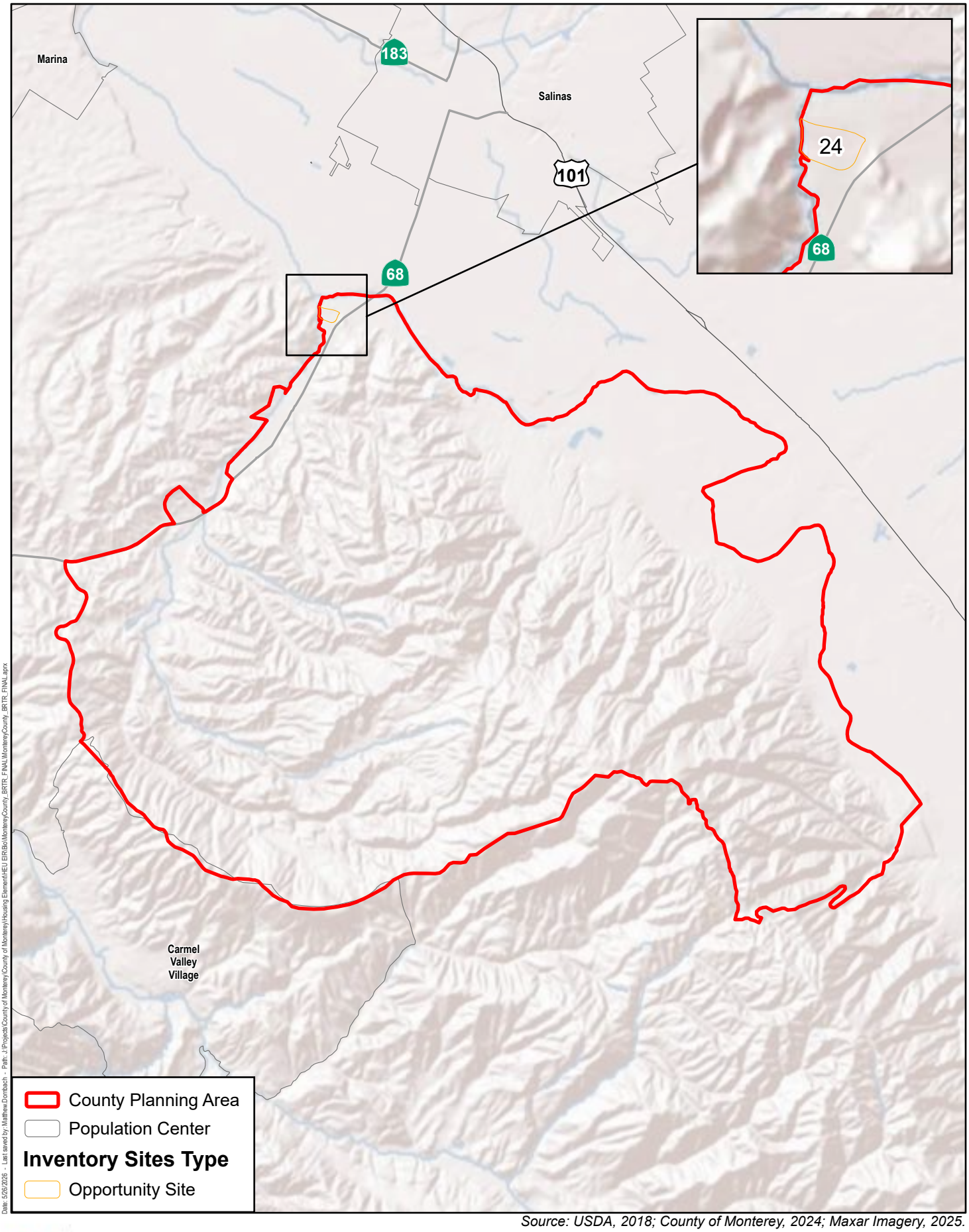
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**Figure 2h**

Project Location - Opportunity Sites in the North County Area Plan (Inland)



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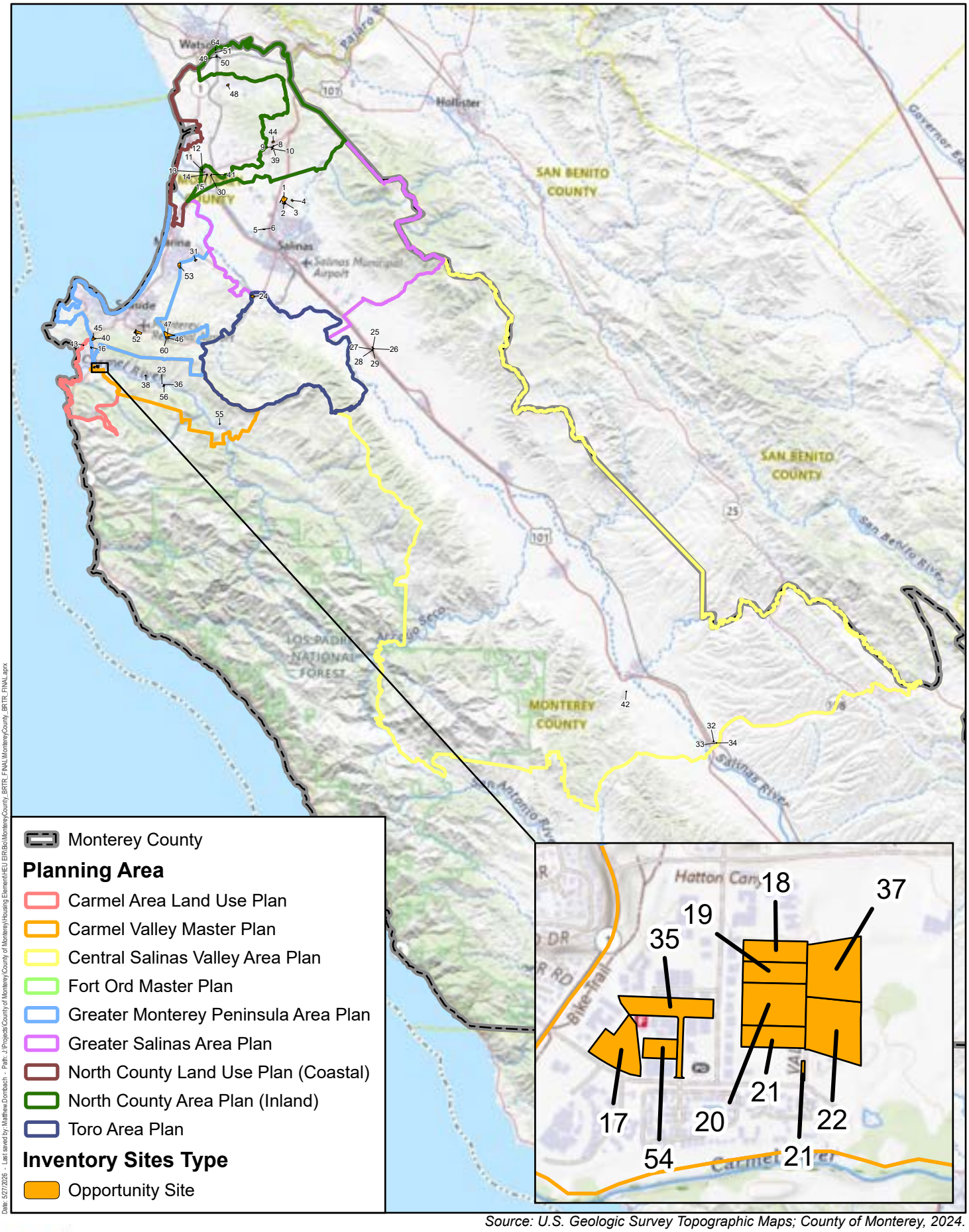

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

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**Figure 2i**

Project Location - Opportunity Sites in the Toro Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




Source: U.S. Geologic Survey Topographic Maps; County of Monterey, 2024.

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**Figure 3**

USGS Topographic Map - Index

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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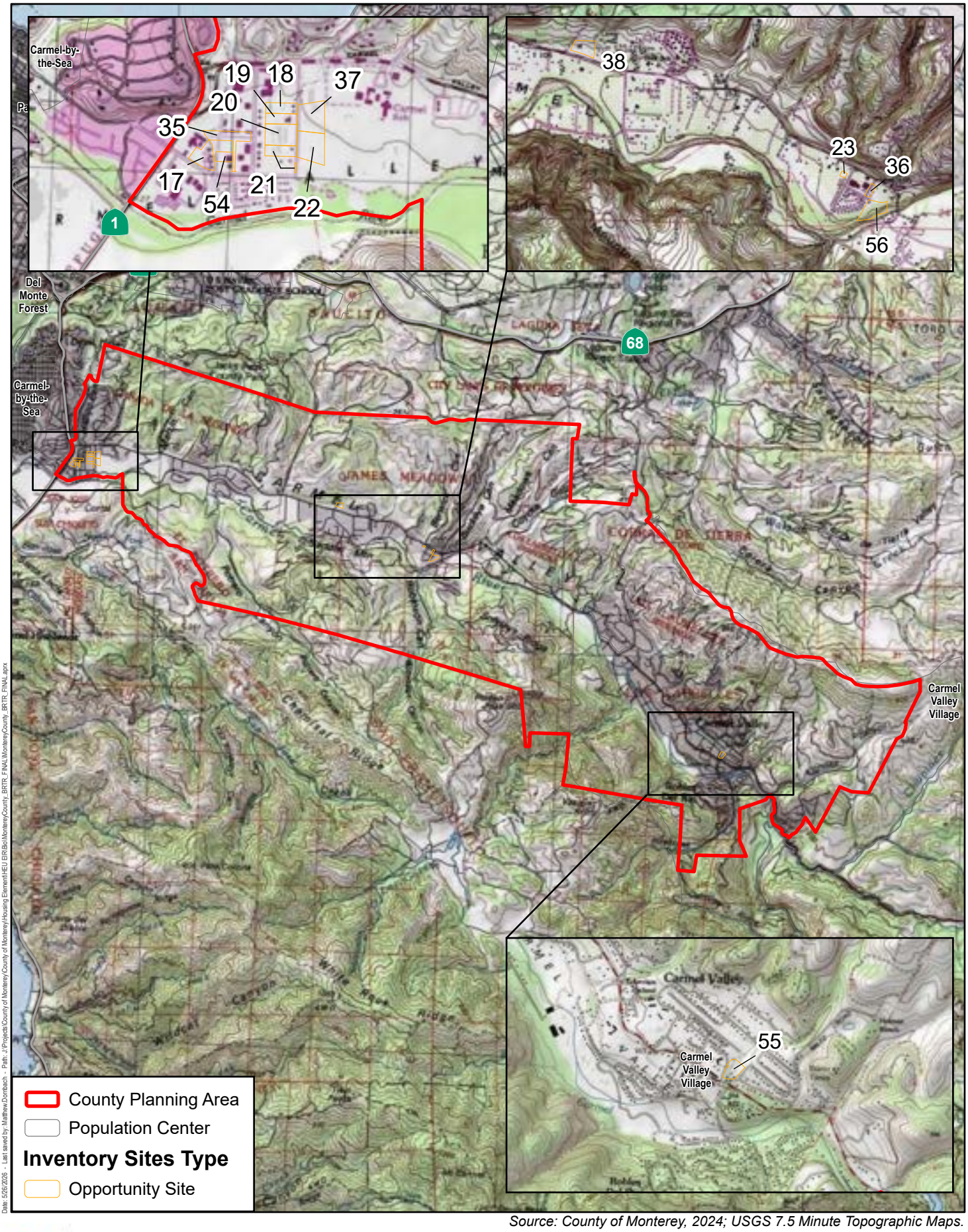
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**Figure 3a**

USGS Topographic Map in Carmel Area Land Use Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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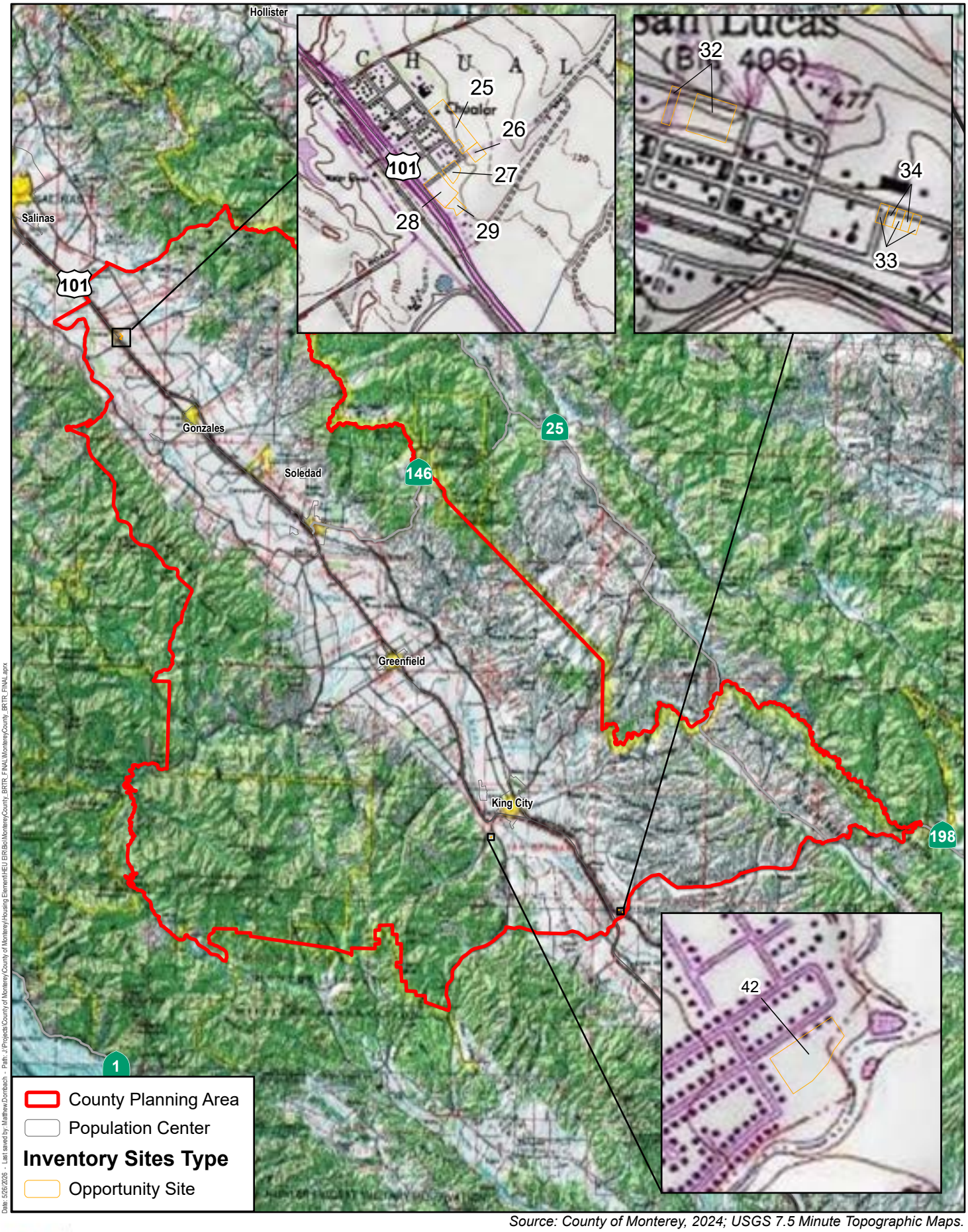
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**Figure 3b**

USGS Topographic Map in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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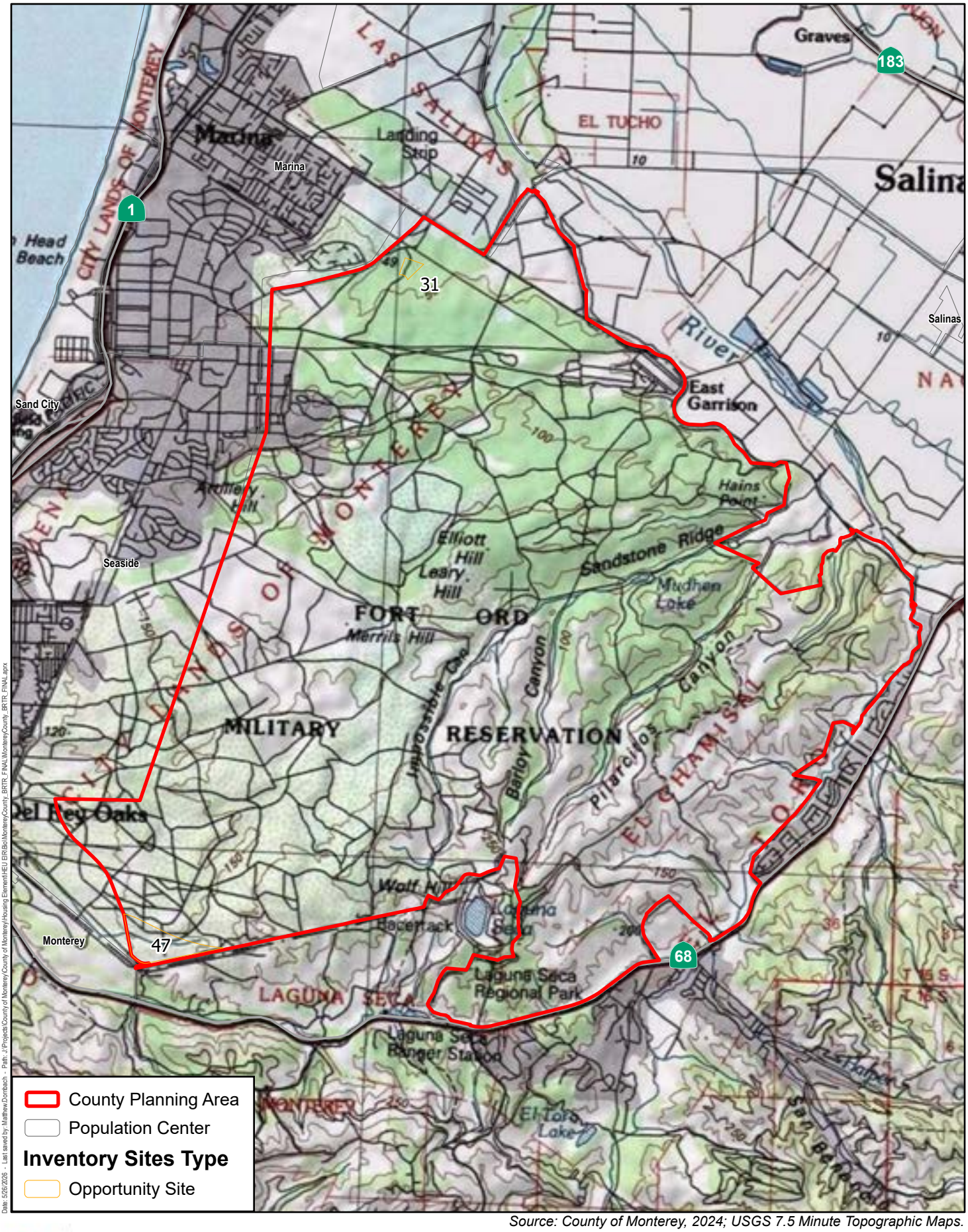
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**Figure 3c**

USGS Topographic Map in Central Salinas Valley Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

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*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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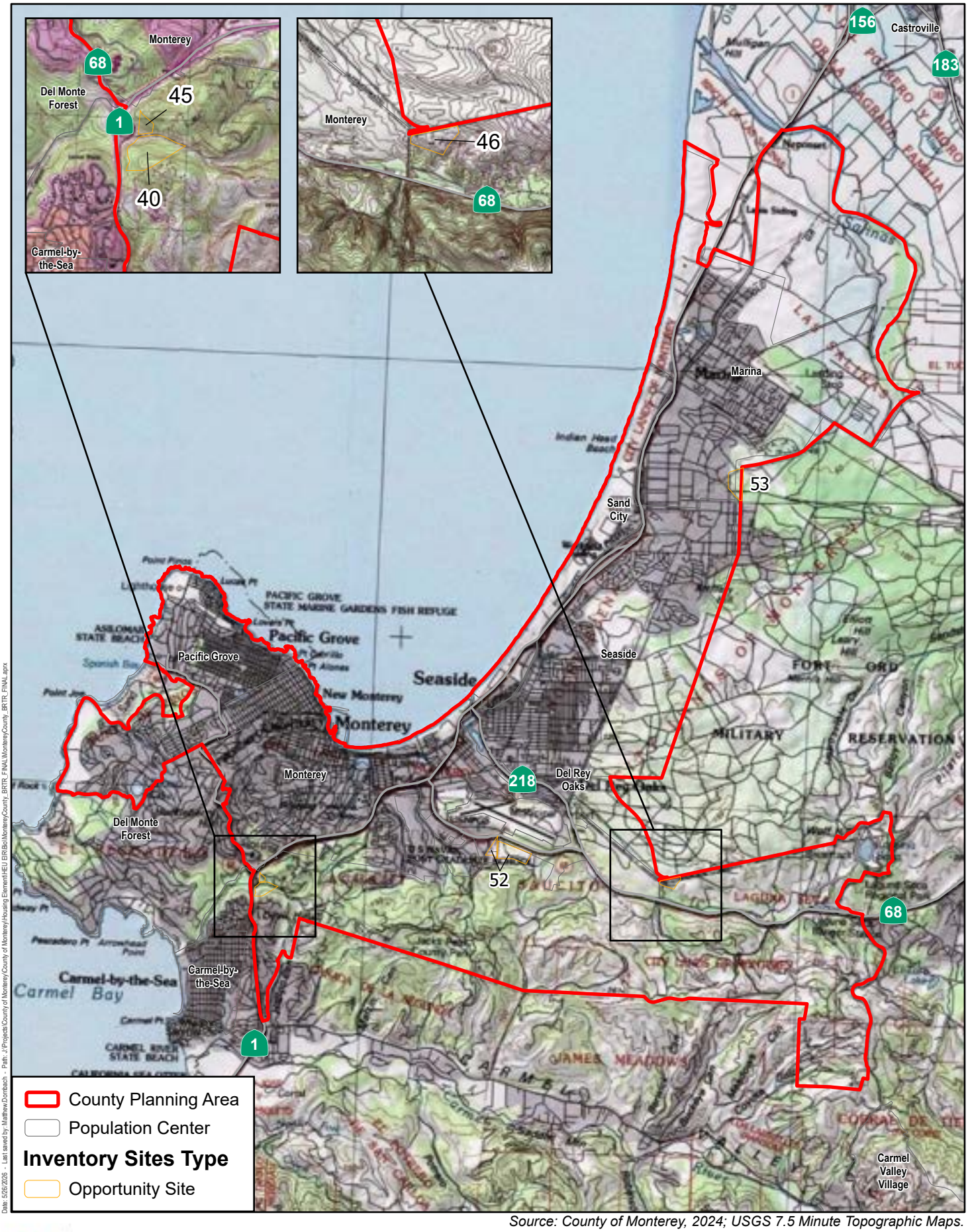
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**Figure 3d**

USGS Topographic Map in Fort Ord Master Plan



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*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

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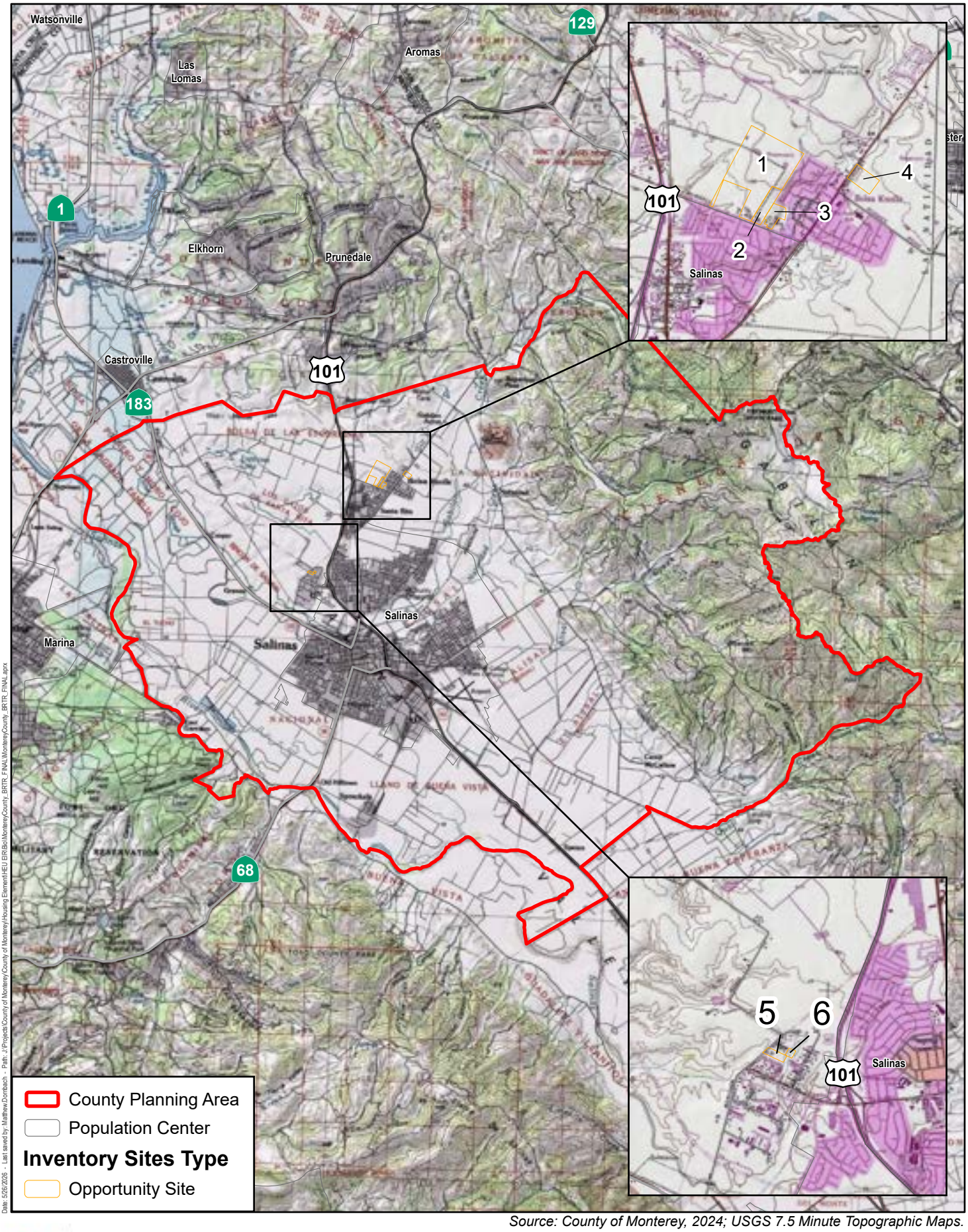
N

0 1.25 2.5

Miles

**Figure 3e**

USGS Topographic Map in Greater Monterey Peninsula Area Plan




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

Harris & Associates

N

0 2 4

Miles

**Figure 3f**

USGS Topographic Map in Greater Salinas Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

Date: 5/26/2026 - Last saved by Matthew.Dontbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU BR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

Harris & Associates

N

0 1 2

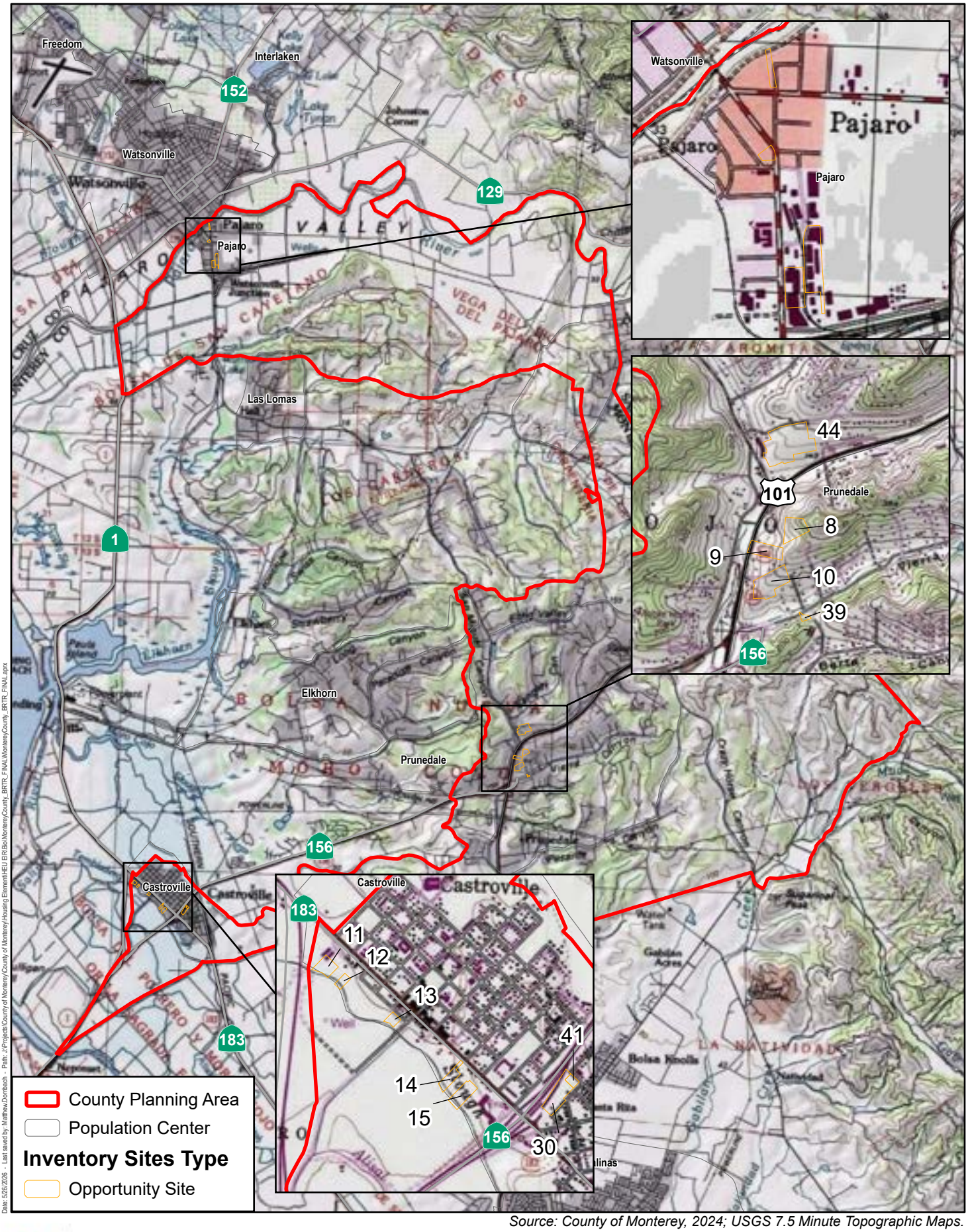
Miles

**Figure 3g**

USGS Topographic Map in North County Land Use Plan (Coastal)



Date: 5/26/2026 - Last saved by Matthew.Dontbeach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU BR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.*

Harris & Associates

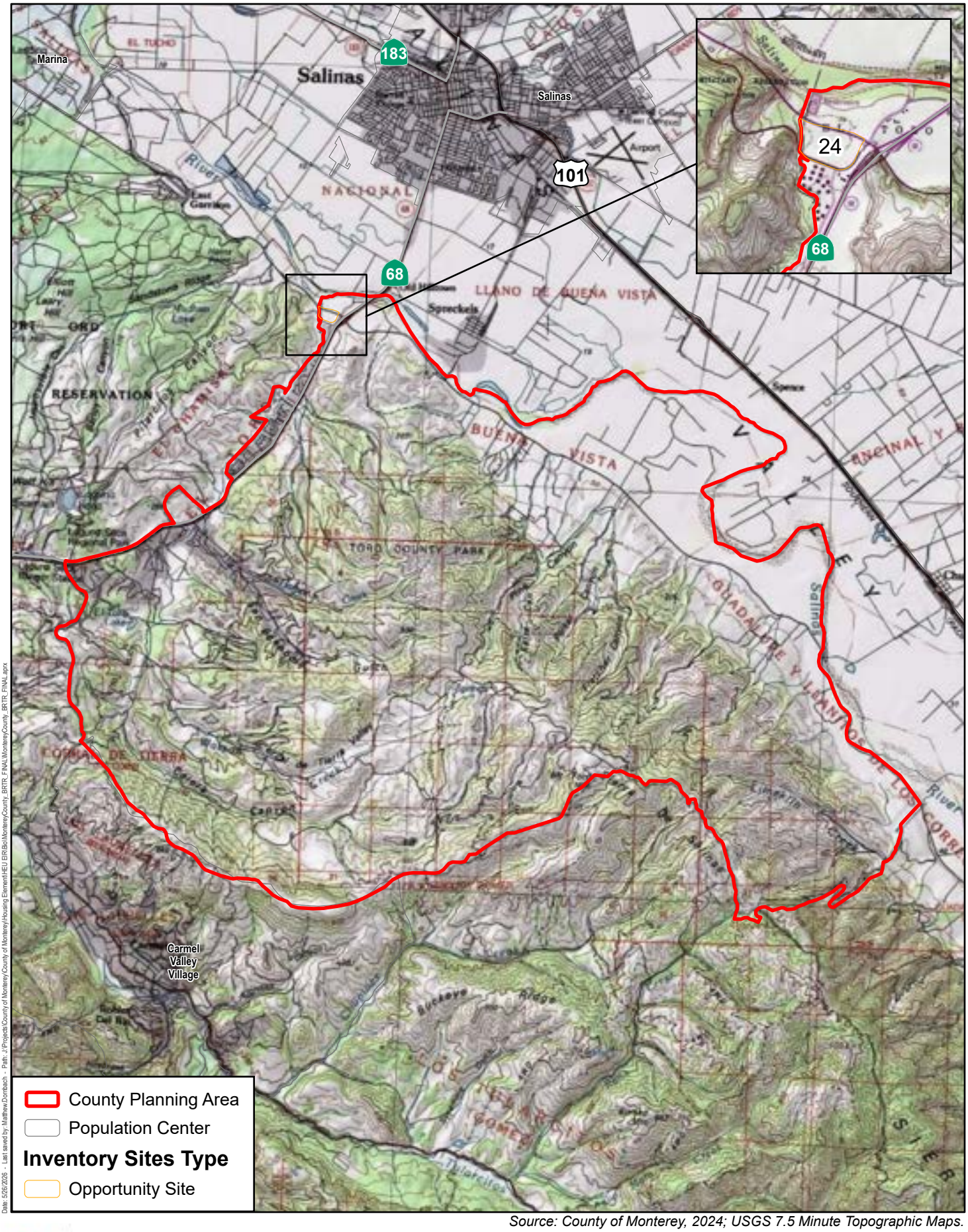
N

0 1.25 2.5

Miles

**Figure 3h**

USGS Topographic Map in North County Area Plan (Inland)




Source: County of Monterey, 2024; USGS 7.5 Minute Topographic Maps.

Harris & Associates

N

0 1.25 2.5

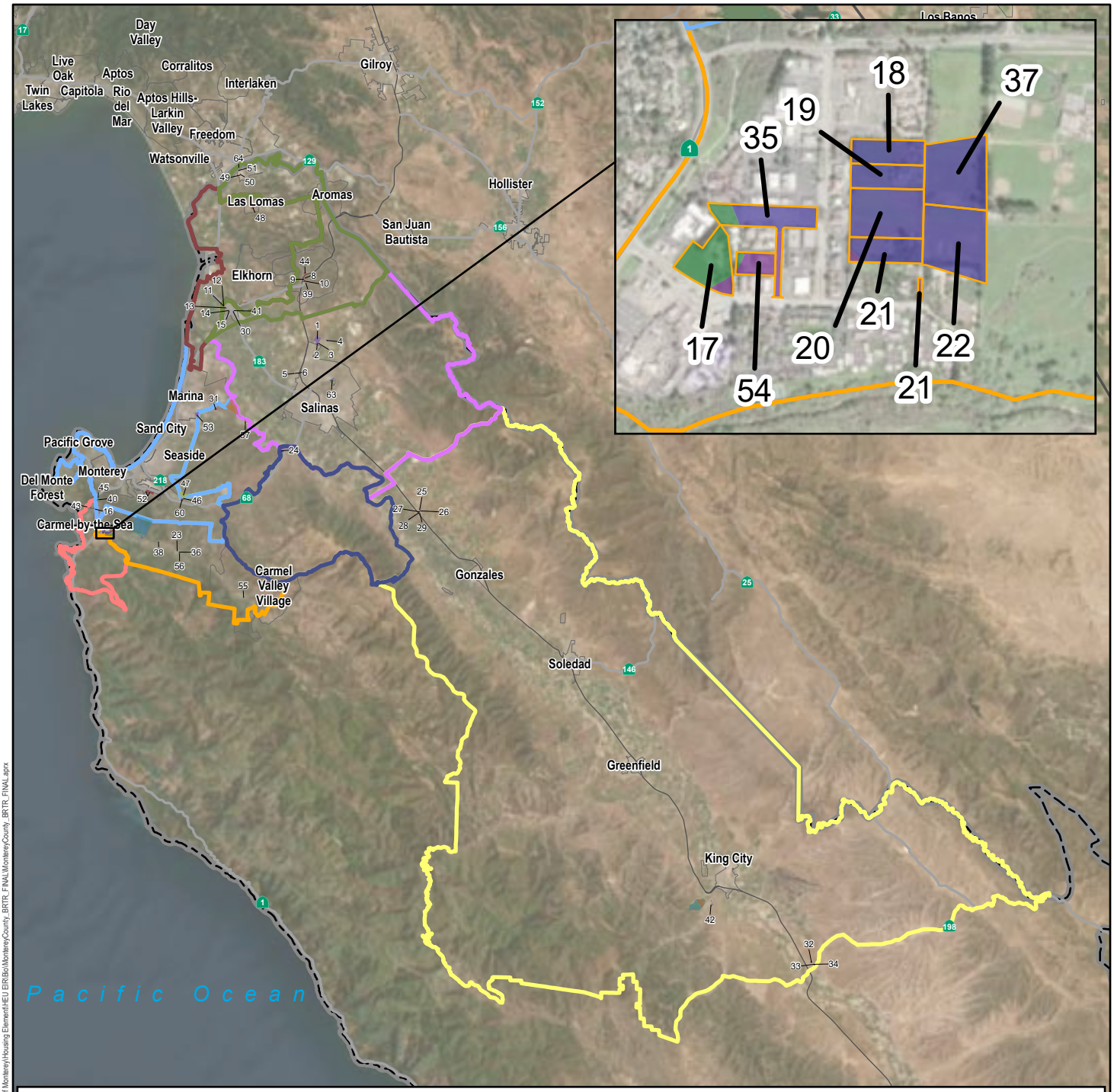
Miles

**Figure 3i**

USGS Topographic Map in Toro Area Plan



Date: 5/26/2026 - Last saved by Matthew.Dontbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




Population Center

**Planning Area**

- Carmel Area Land Use Plan
- Carmel Valley Master Plan
- Central Salinas Valley Area Plan
- Fort Ord Master Plan
- Greater Monterey Peninsula Area Plan
- Greater Salinas Area Plan
- North County Land Use Plan (Coastal)
- North County Area Plan (Inland)
- Toro Area Plan

**Soils**

- Alviso Silty Clay Loam
- Antioch Very Fine Sandy Loam
- Arnold Loamy Sand
- Arnold-Santa Ynez Complex
- Arroyo Seco Gravelly Loam
- Baywood Sand
- Chamise Channery Loam
- Chamise Shaly Loam
- Chualar Loam
- Clear Lake Clay
- Corducci-Typic Xerofluvents
- Cropley Silty Clay
- Diablo Clay
- Dibble Silt Loam
- Elder Sandy Loam
- Elder Very Fine Sandy Loam
- Elkhorn Fine Sandy Loam
- Garey Sandy Loam
- Lockwood Channery Loam
- Lockwood Shaly Loam
- Metz Fine Sandy Loam
- Mocho Silt Loam
- Narlon Loamy Fine Sand
- Oceano Loamy Sand
- Pacheco Clay Loam
- Pico Fine Sandy Loam
- Placentia Sandy Loam
- Rincon Clay Loam
- Rock Outcrop-Xerorthent Association
- Salinas Clay Loam
- Santa Lucia Channery Clay Loa
- Santa Lucia Channery Clay Loam
- Santa Lucia Shaly Clay Loam
- Santa Lucia-Reliz Association
- Santa Ynez Fine Sandy Loam
- Tujunga Fine Sand
- Water
- Xerorthents, Dissected
- Xerorthents, Loamy
- Xerorthents, Sandy

*Source: USDA, 2000; Maxar Imagery, 2023; Monterey County, 2024.*

Harris & Associates

N

0 5 10

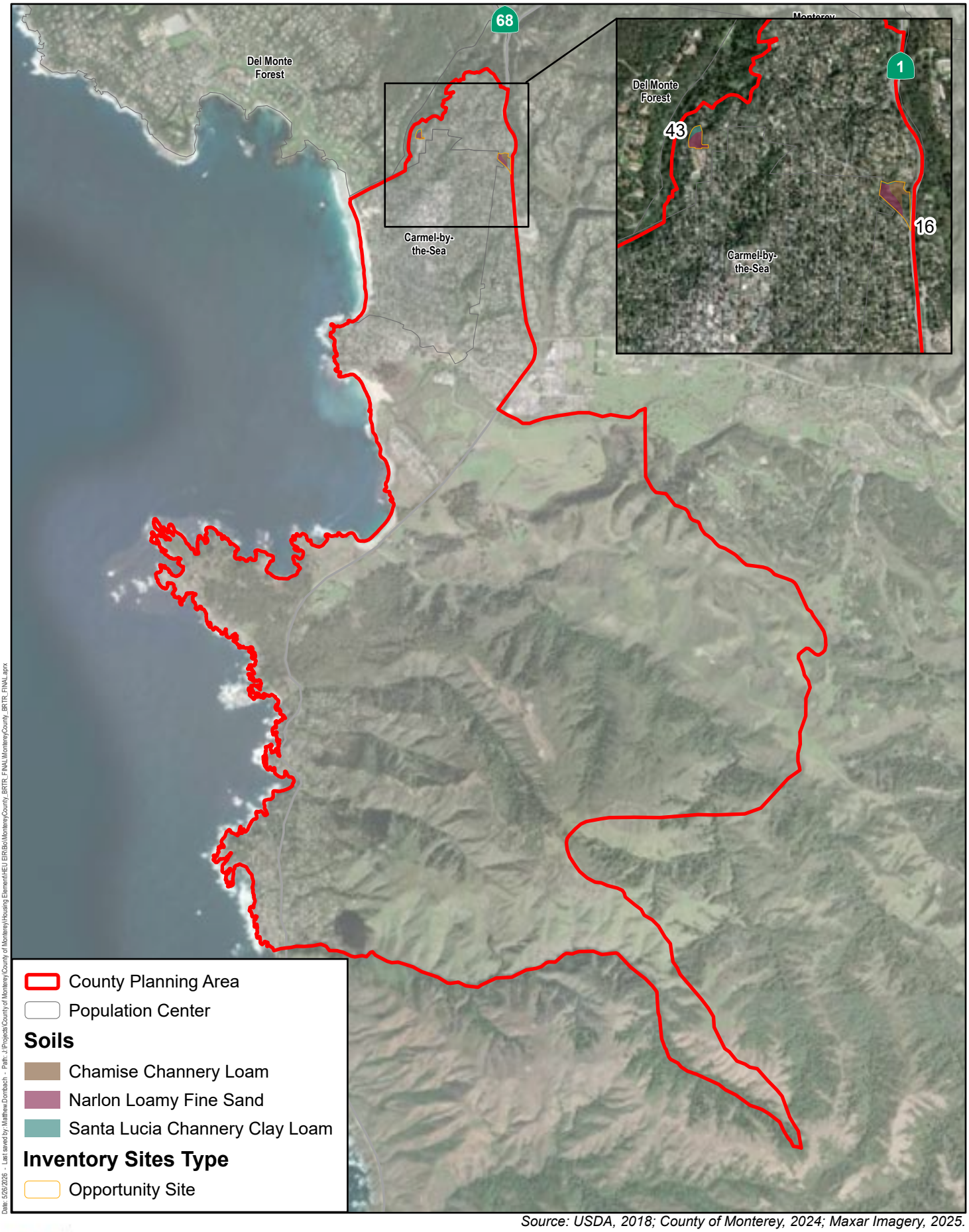
Miles

**Figure 4**

Soils - Index

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

Date: 5/27/2026 - Last saved by Matthew.Dontbeach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_8RTR_FINAL\MontereyCounty_8RTR_FINAL.aprx



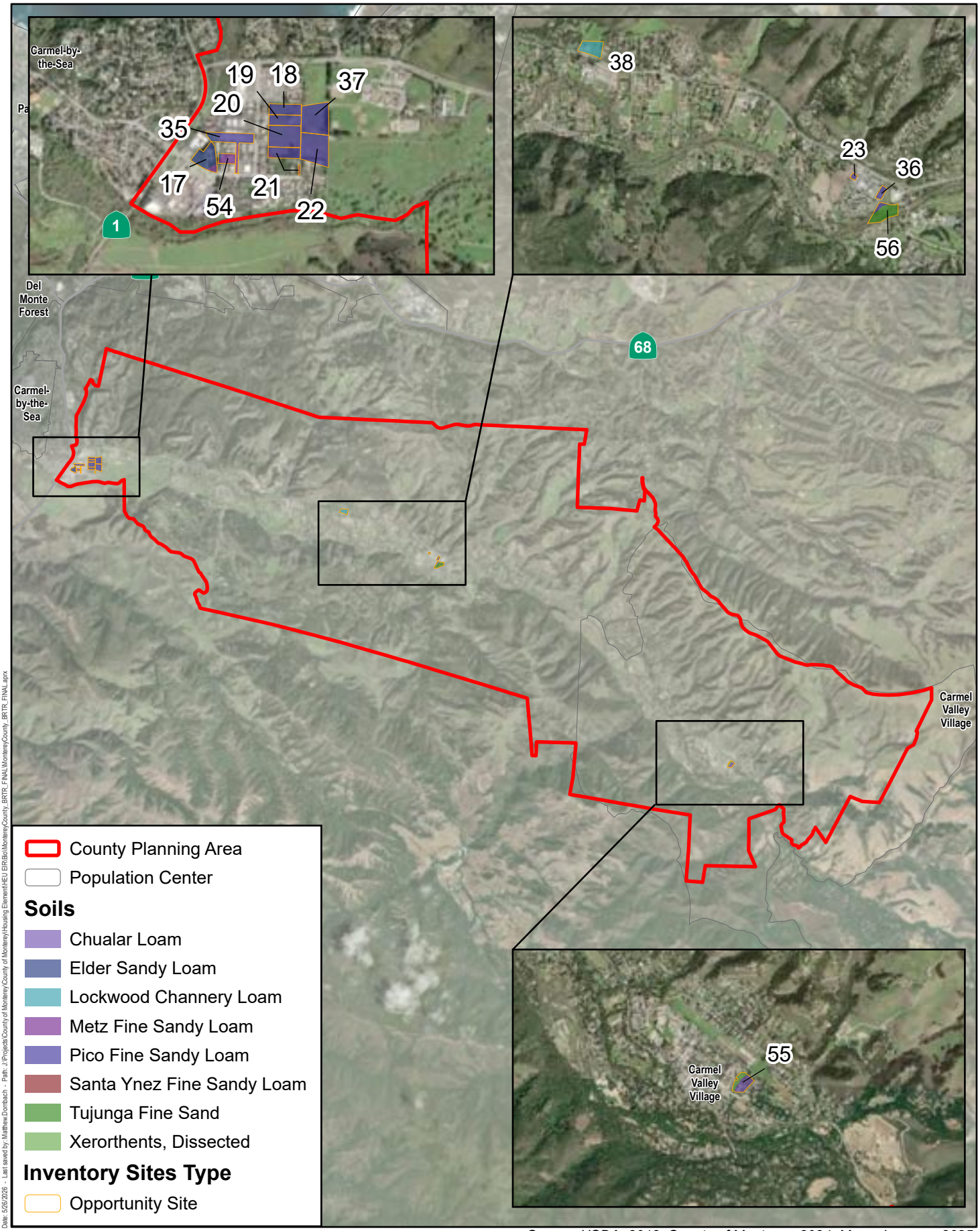

Date: 5/26/2026 - Last saved by Matthew.Dornbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

**Figure 4a**

Soils in Carmel Area Land Use Plan




Date: 5/26/2026 - Last saved by Matthew.Dorrbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

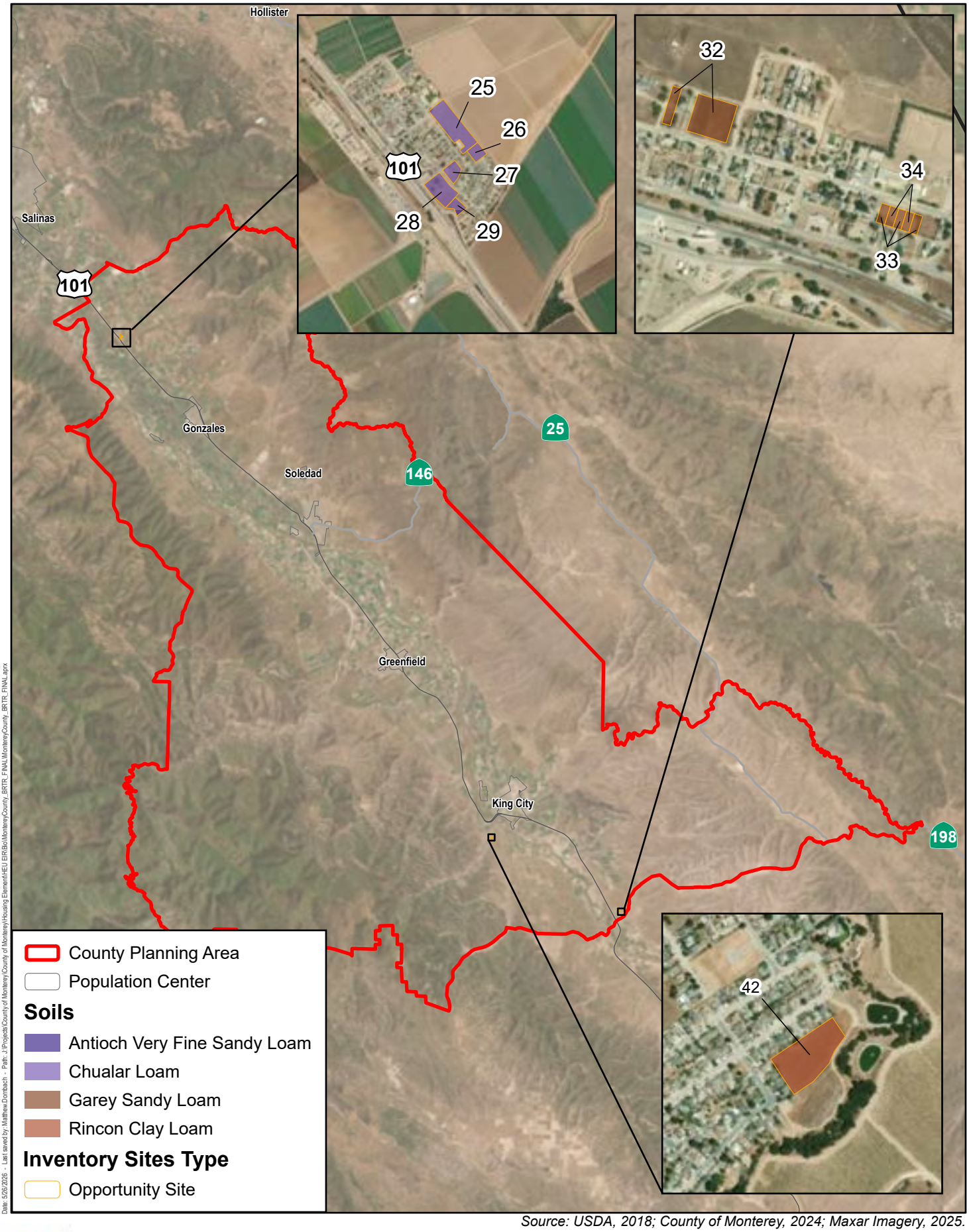
0 1.25 2.5

Miles

**Figure 4b**

Soils in Carmel Valley Master Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

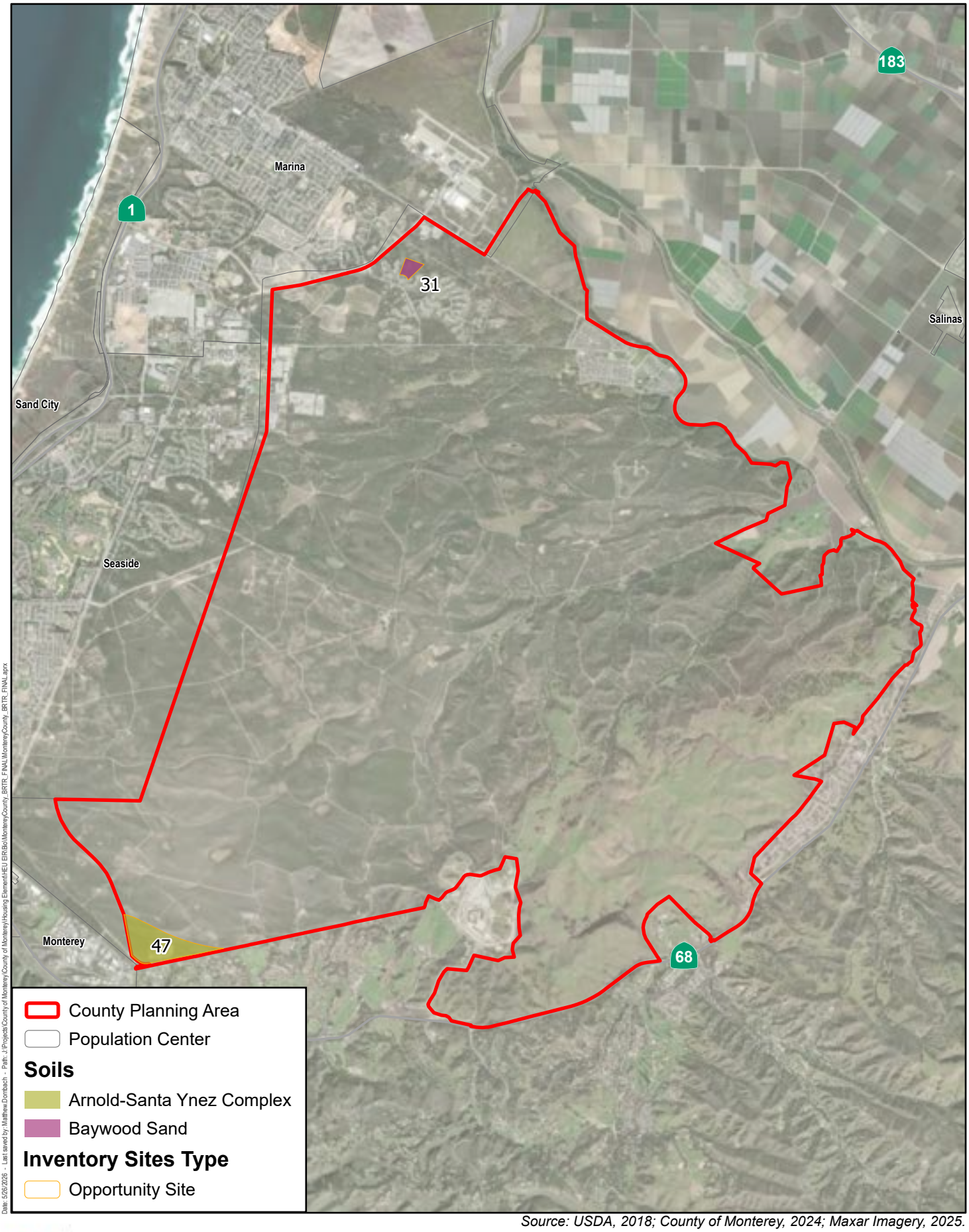
N

0 4.5 9

Miles

**Figure 4c**

Soils in Central Salinas Valley Area Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

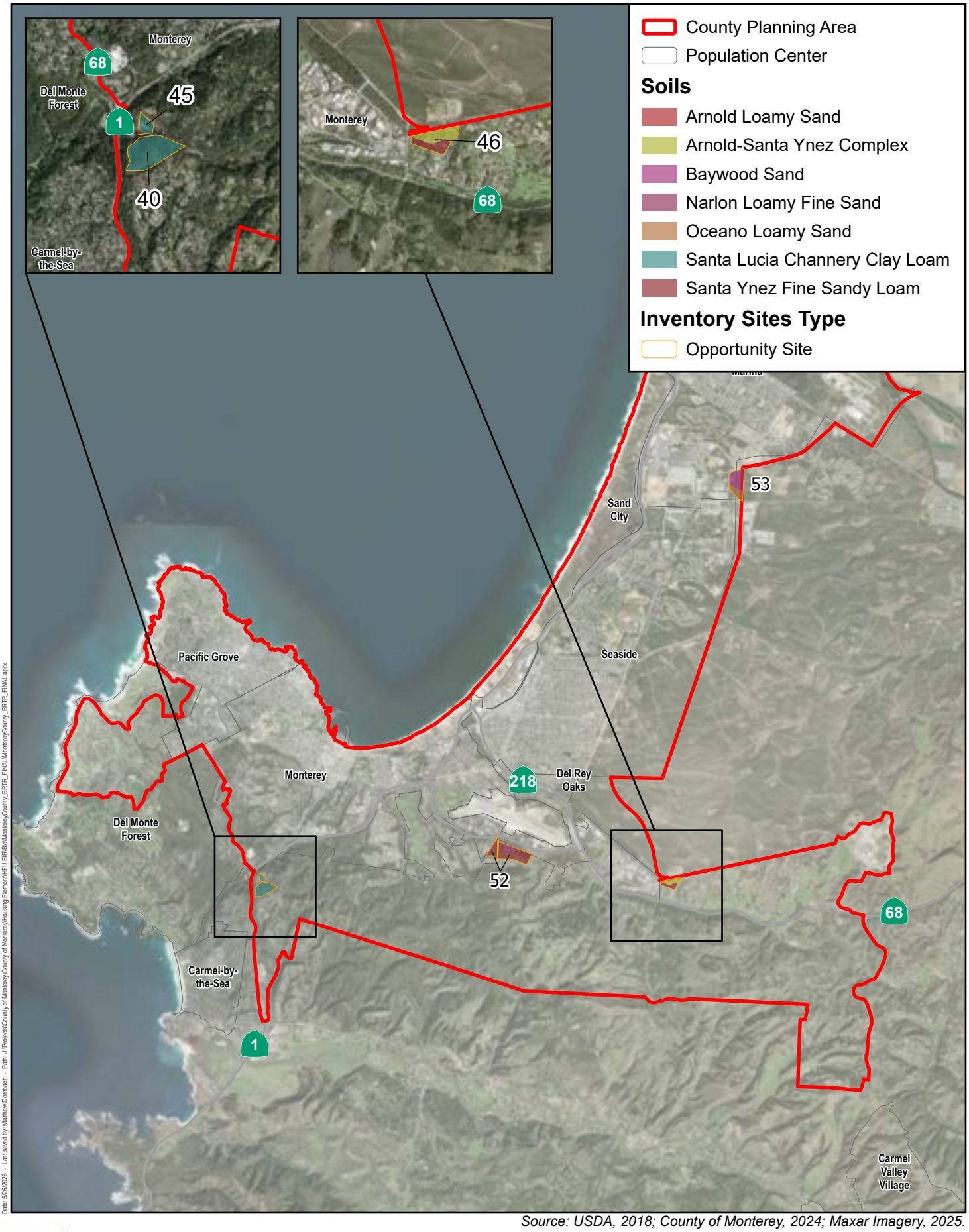
N

0 0.75 1.5

Miles

**Figure 4d**

Soils in Fort Ord Master Plan




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

0 1.25 2.5

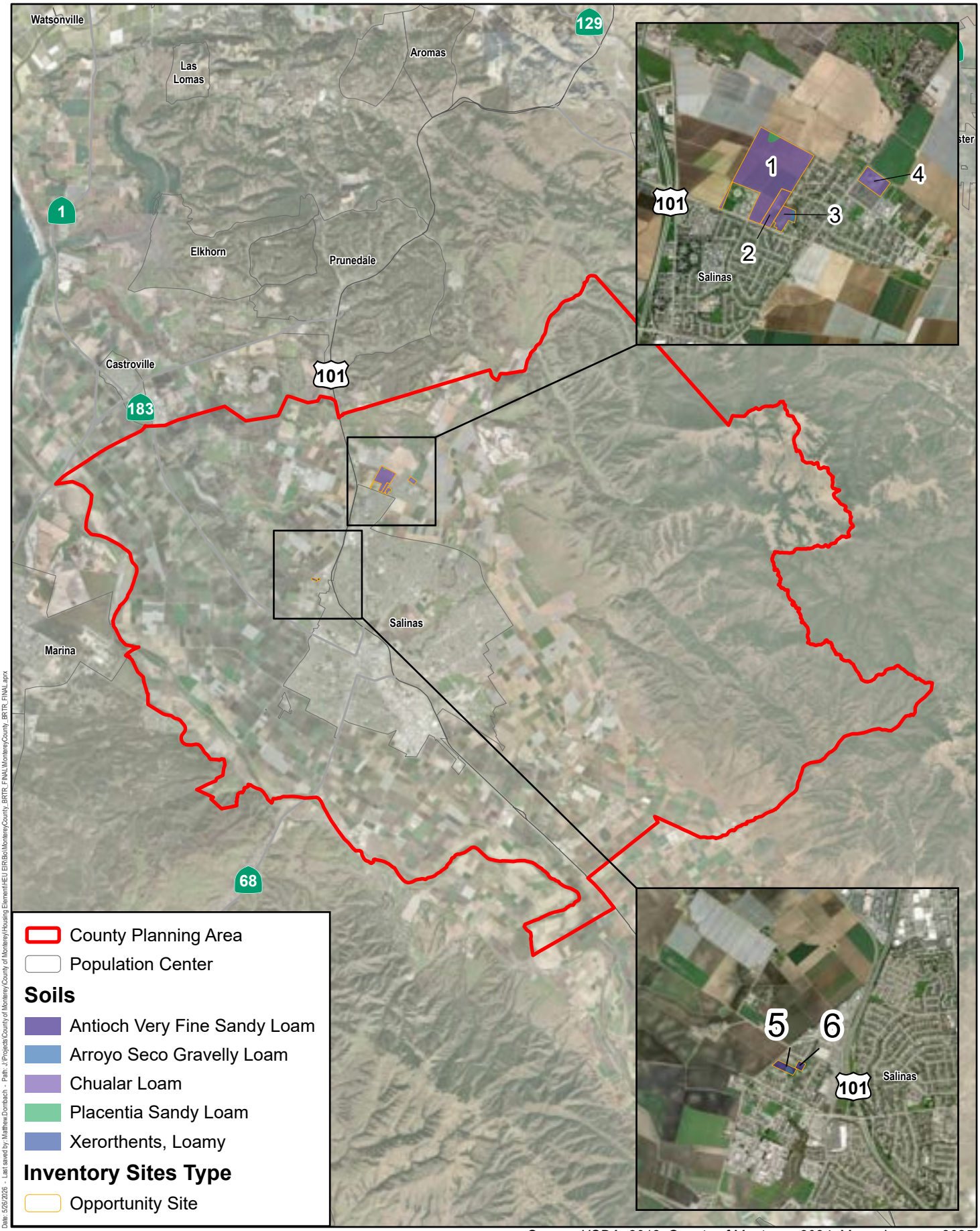
Miles

**Figure 4e**

Soils in Greater Monterey Peninsula Area Plan

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update

Date: 5/26/2026 - Last saved by Matthew.Dontleach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU BR\Bio\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

0 2 4

Miles

**Figure 4f**

Soils in Greater Salinas Area Plan




Date: 5/26/2026 - Last saved by MatthewDornbach - Path: J:\Projects\County of Monterey\County of Monterey\Housing Element\HEU EIR\Gis\MontereyCounty_BRTR_FINAL\MontereyCounty_BRTR_FINAL.aprx

*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

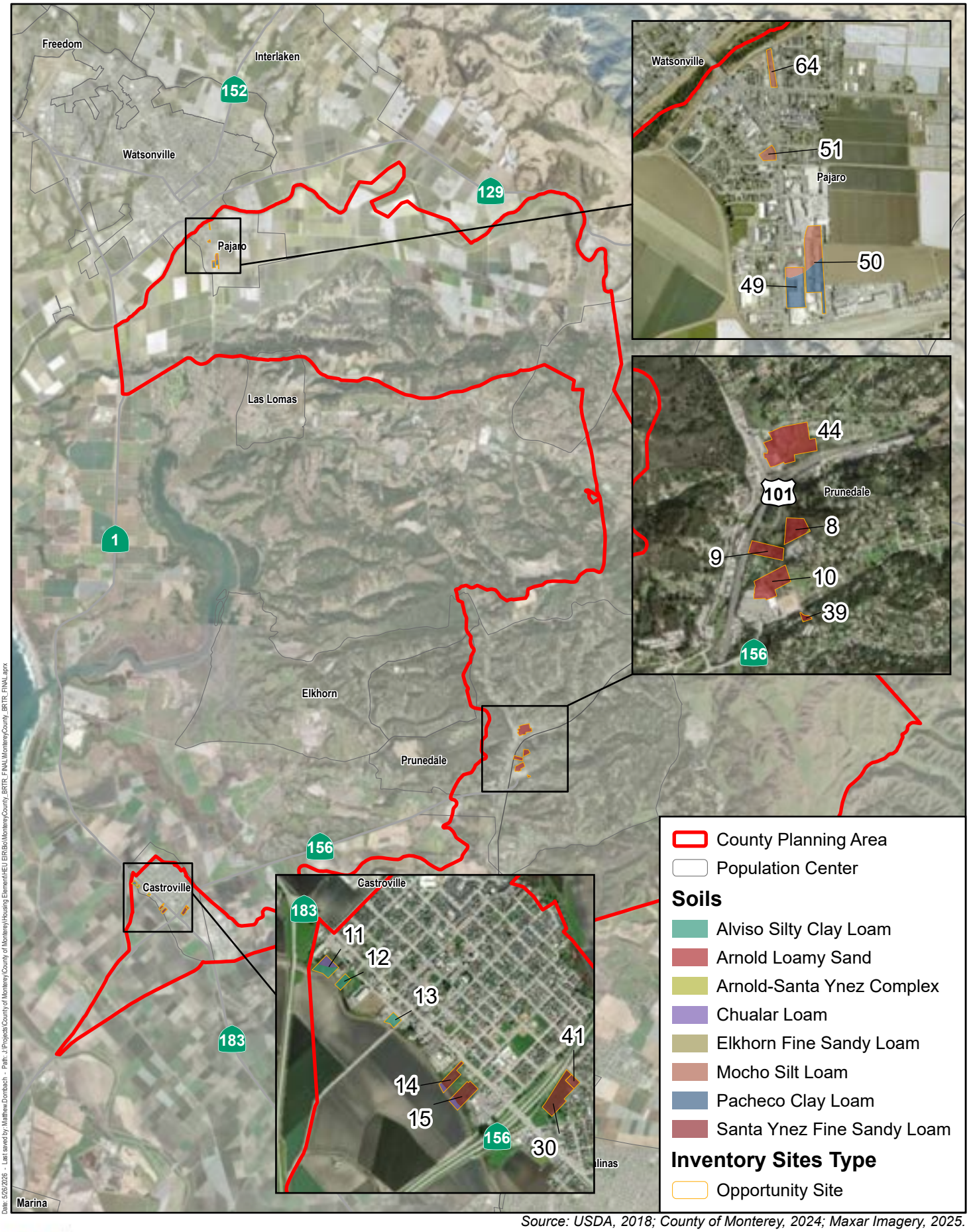
0 1 2

Miles

**Figure 4g**

Soils in North County Land Use Plan (Coastal)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




*Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.*

Harris & Associates

N

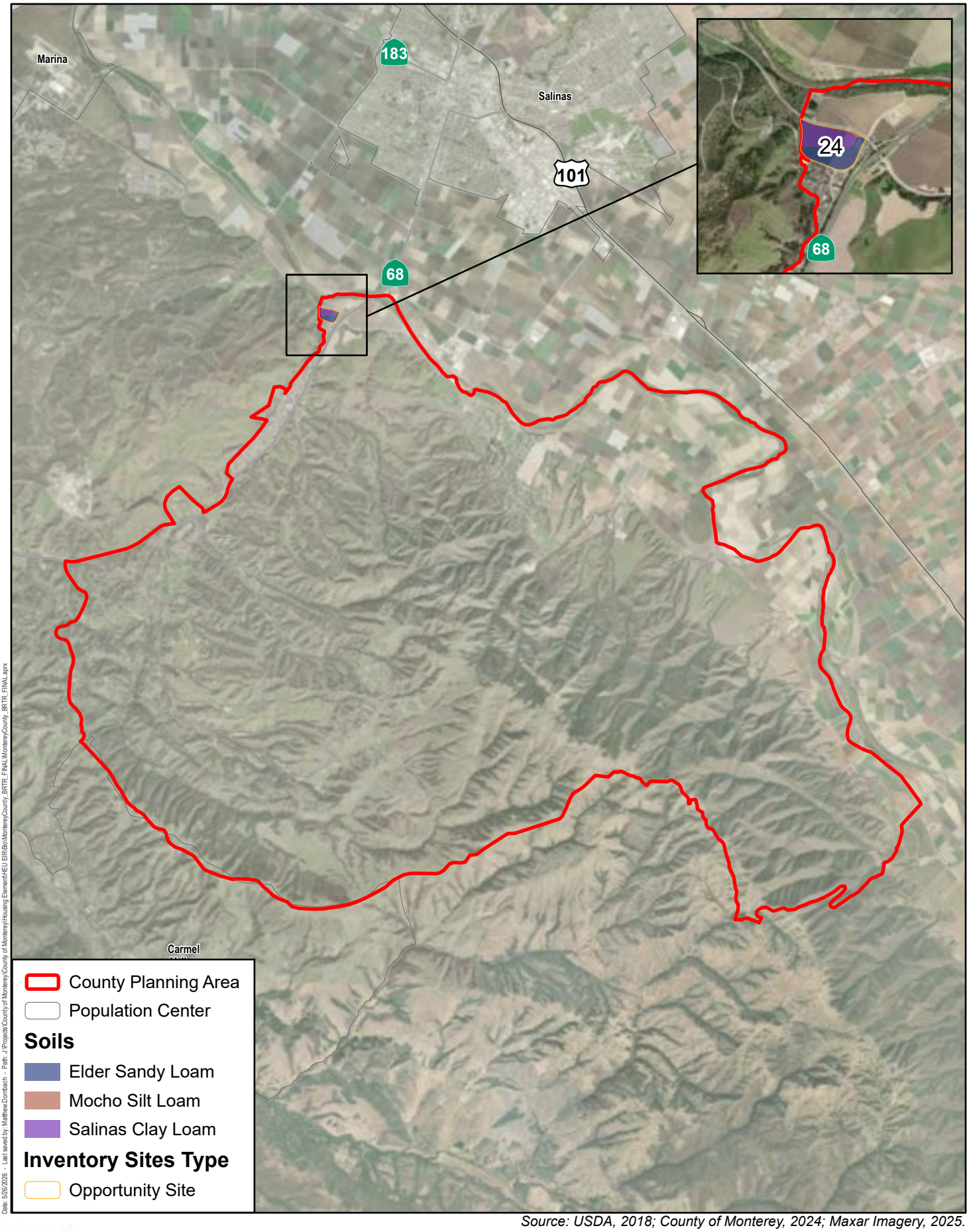
0 1.25 2.5

Miles

**Figure 4h**

Soils in North County Area Plan (Inland)

County of Monterey General Plan Housing Element Sixth Cycle (2023-2031) Update




Source: USDA, 2018; County of Monterey, 2024; Maxar Imagery, 2025.

Harris & Associates

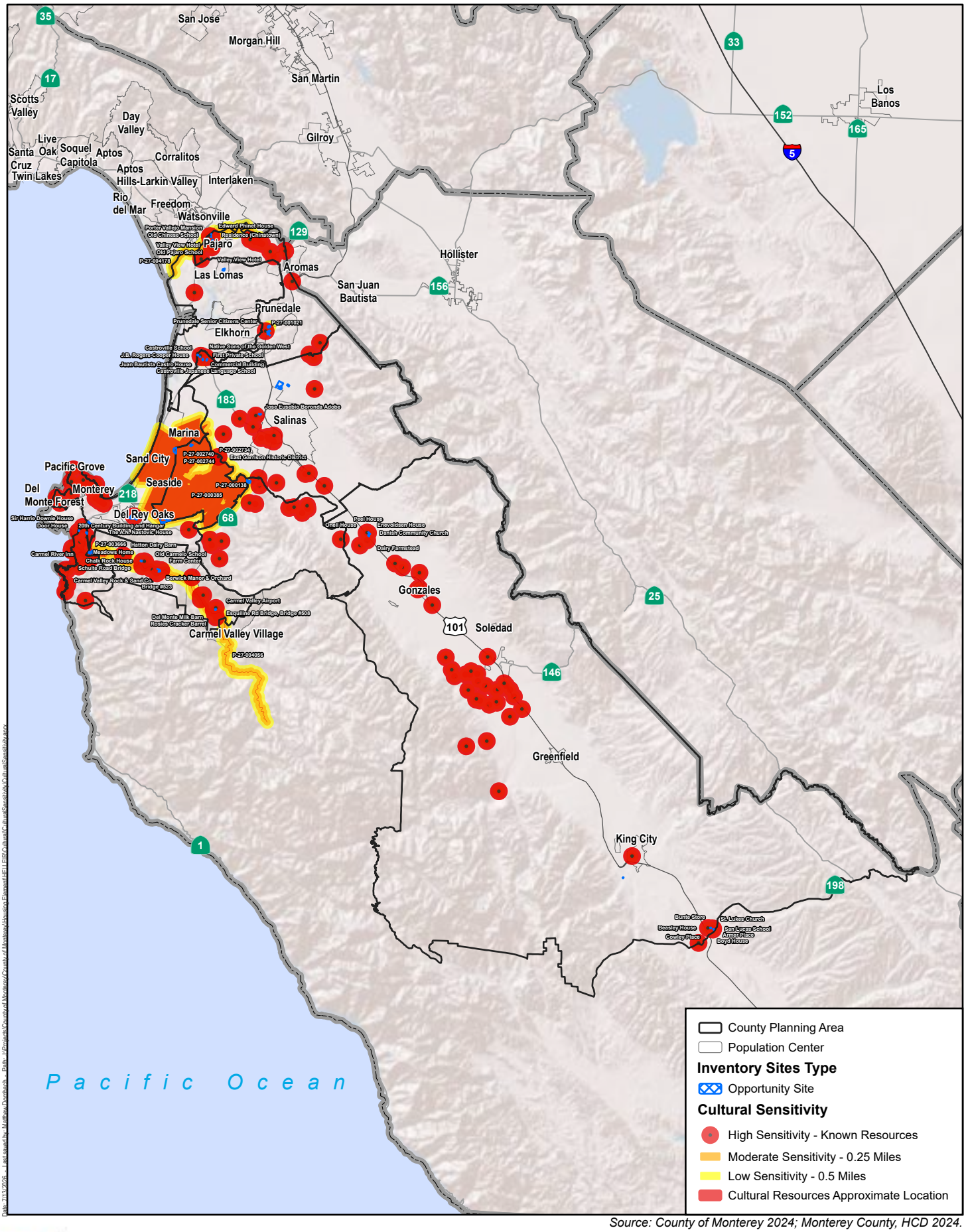
N

0 1.25 2.5

Miles

**Figure 4i**

Soils in Toro Area Plan




*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

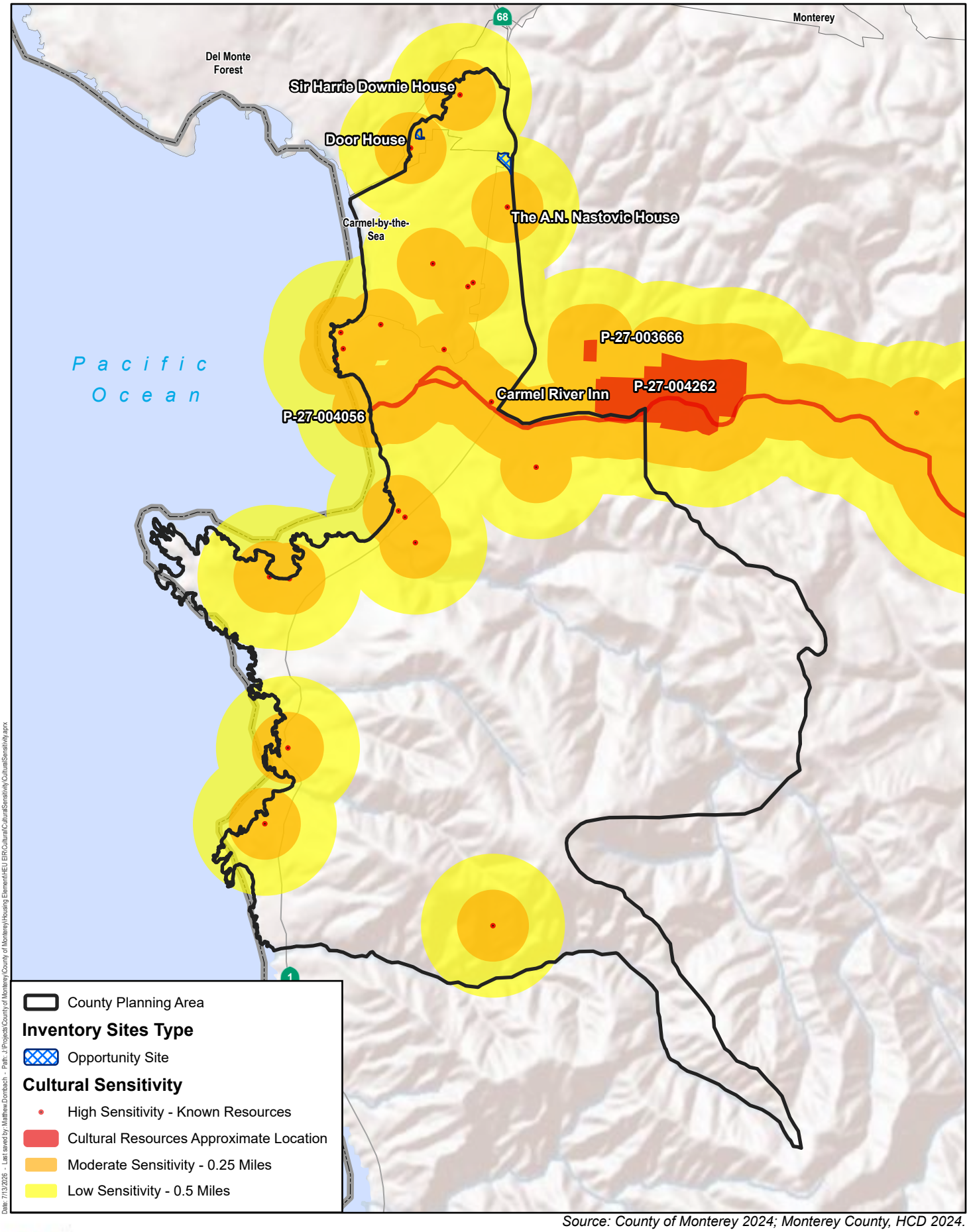
N

0 5 10

Miles

# Figure 5

Cultural Sensitivity for Monterey County

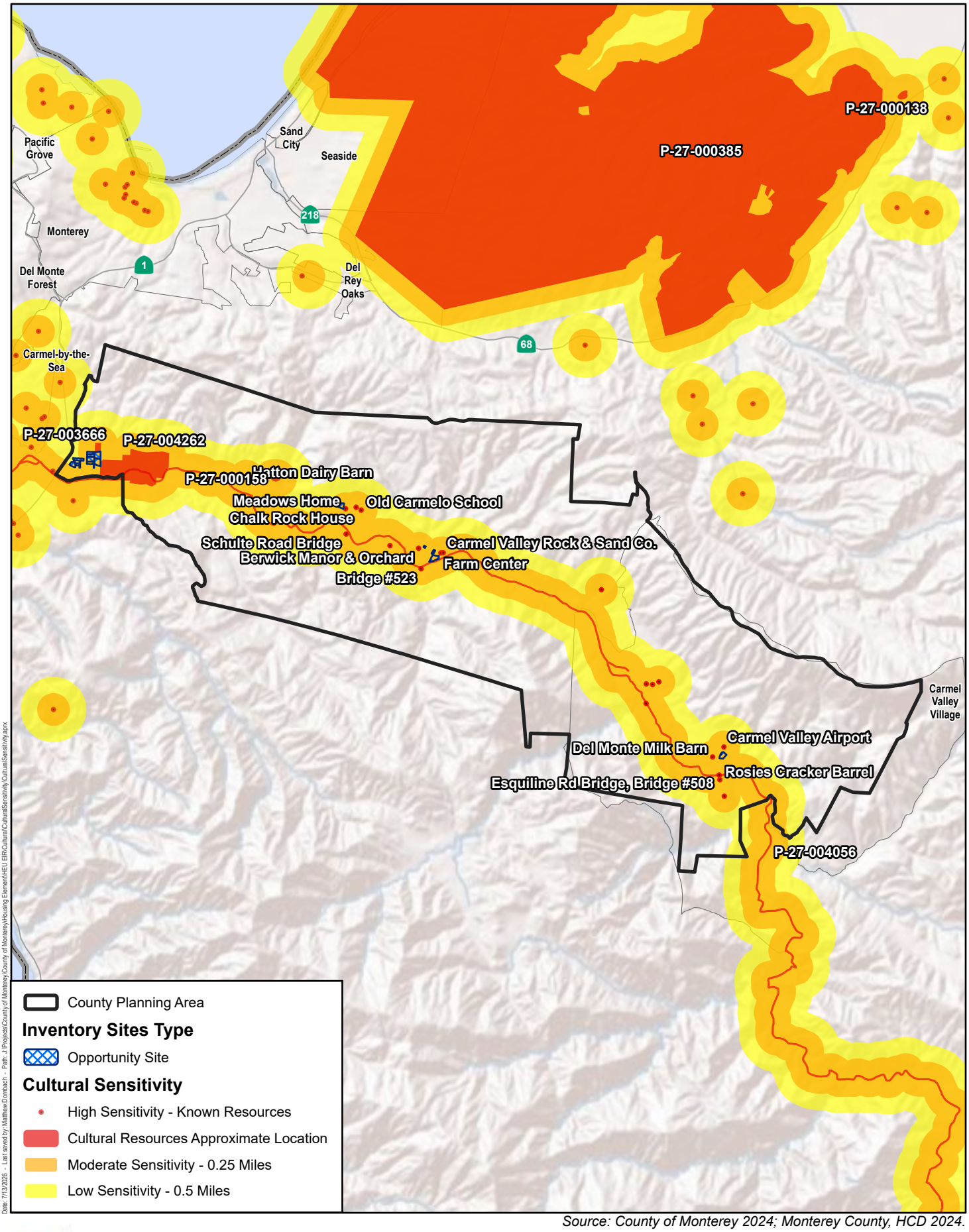



*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5a**

Cultural Sensitivity in the Carmel Area Land Use Plan




*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

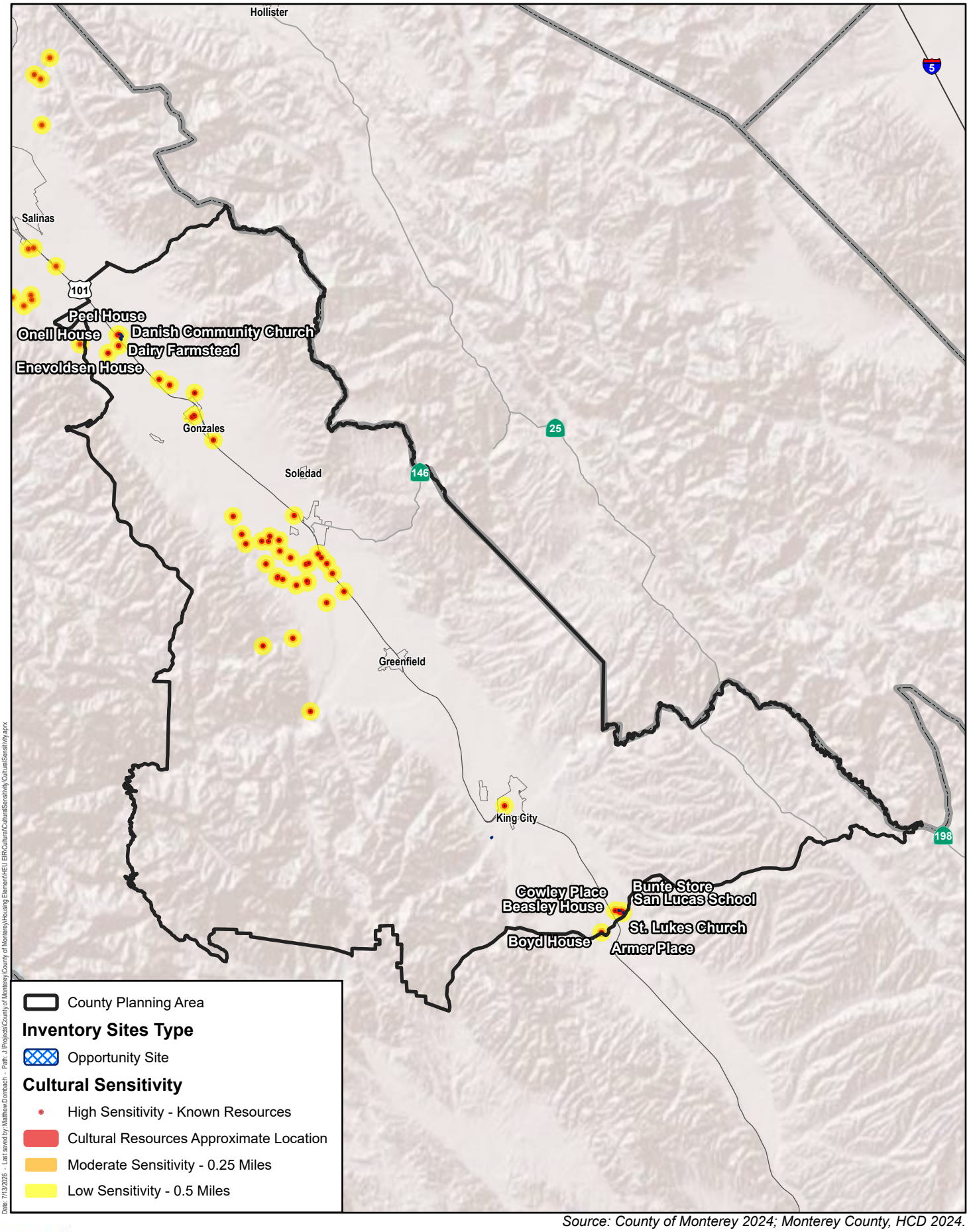
N

0 1.25 2.5

Miles

**Figure 5b**

Cultural Sensitivity in the Carmel Valley Master Plan




*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

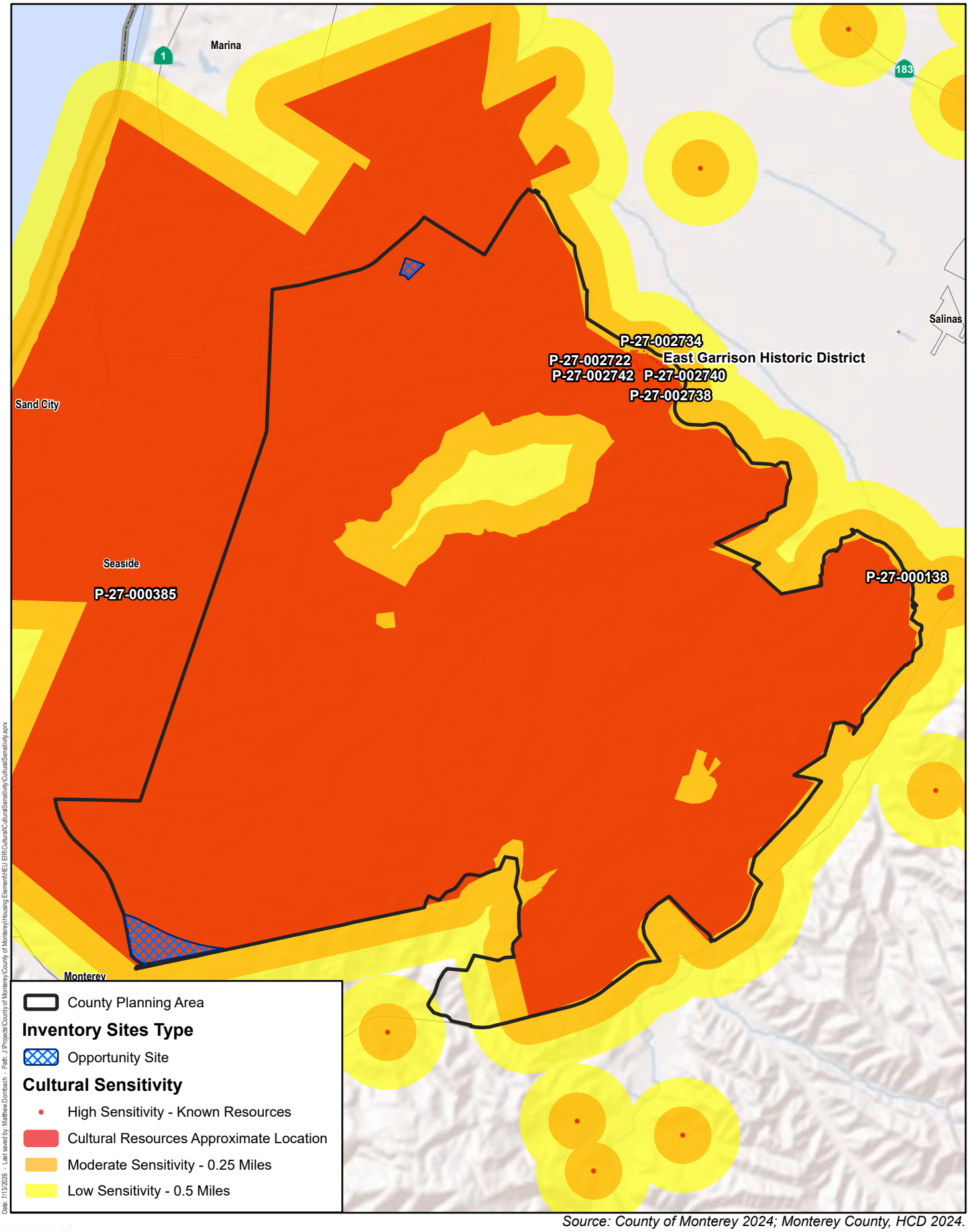
N

0 4.5 9

Miles

**Figure 5c**

Cultural Sensitivity in the Central Salinas Valley Area Plan

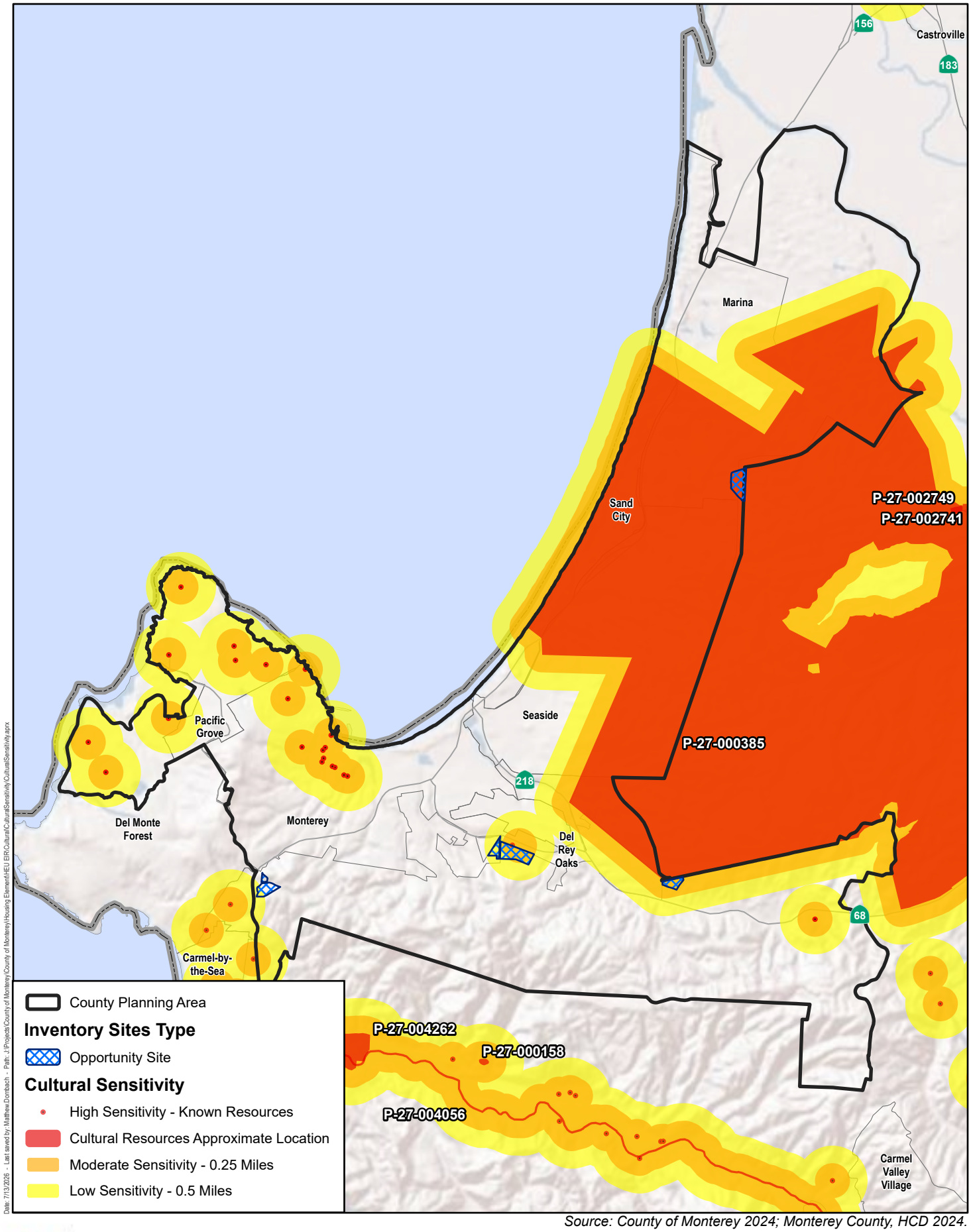



*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5d**

Cultural Sensitivity in the Fort Ord Master Plan




*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

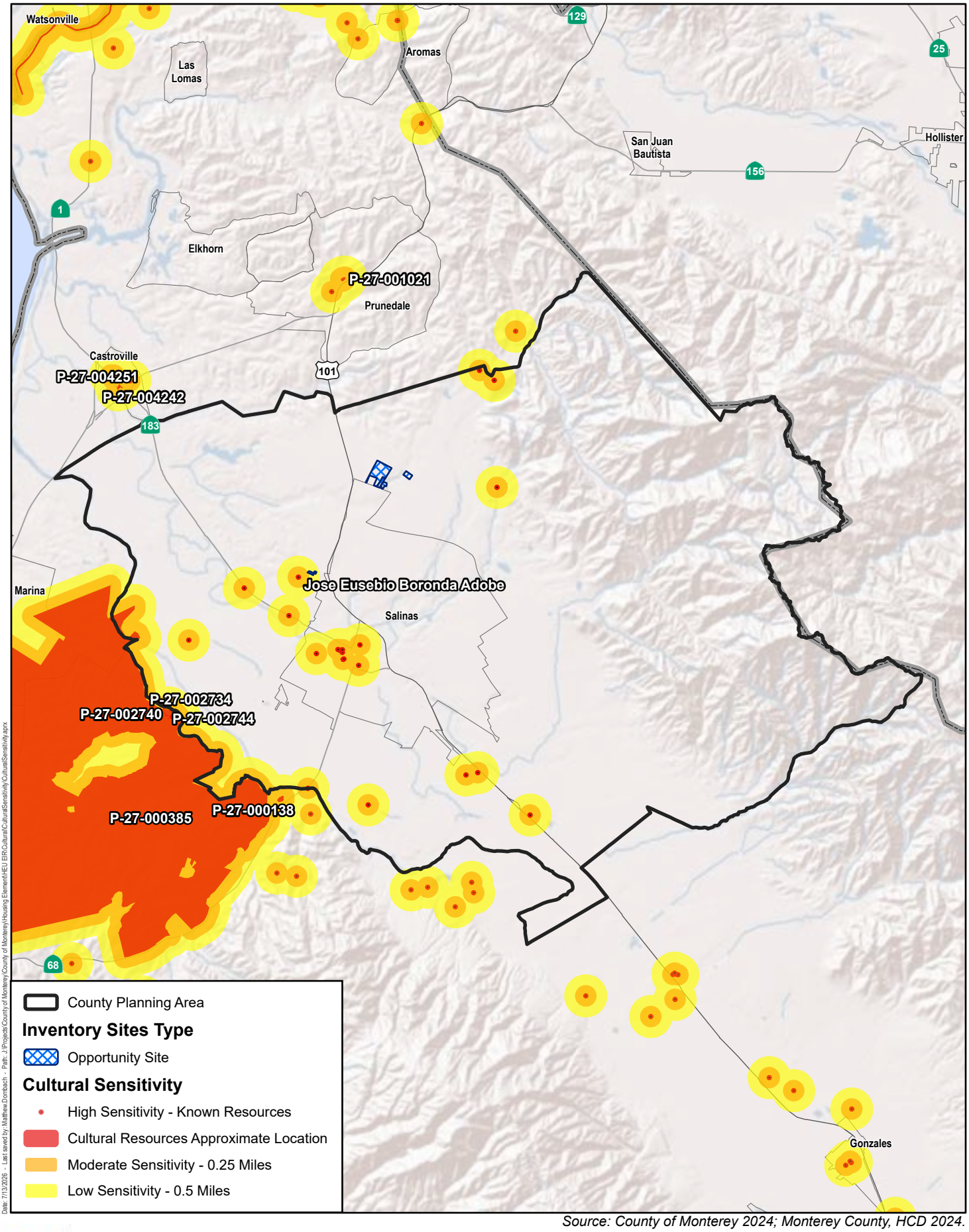
N

0 1.25 2.5

Miles

**Figure 5e**

Cultural Sensitivity in the Greater Monterey Peninsula Area Plan



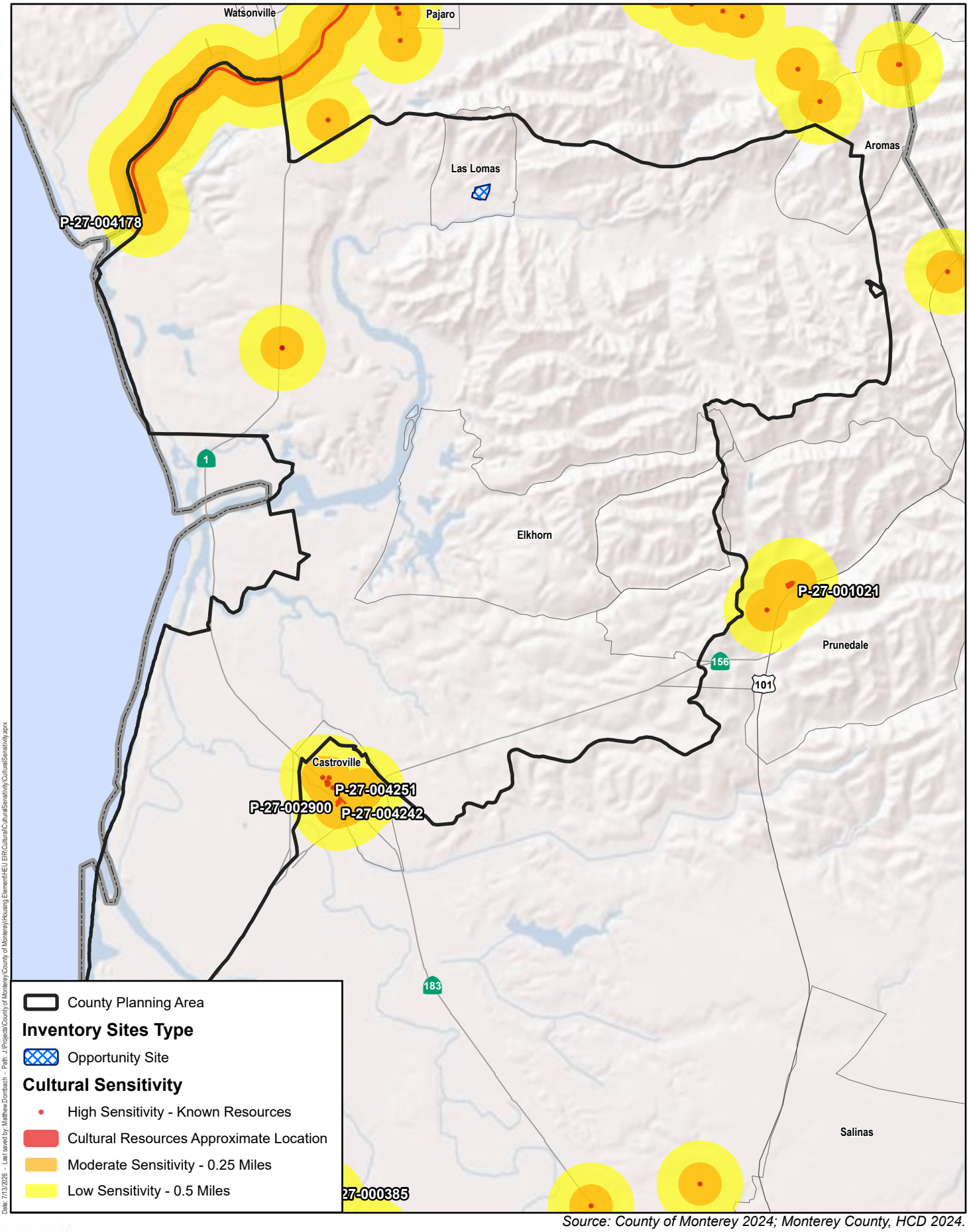

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*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5f**

Cultural Sensitivity in the Greater Salinas Area Plan

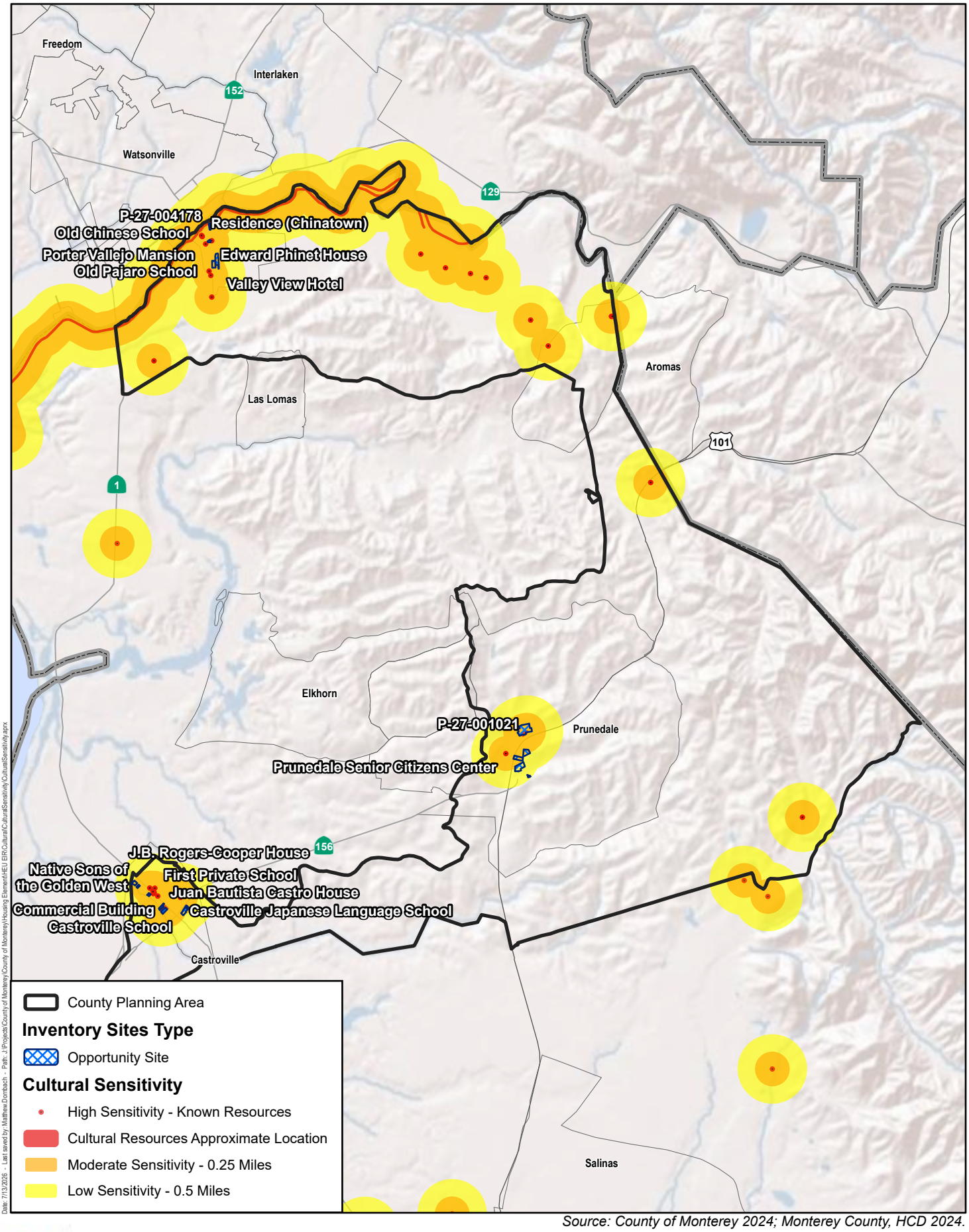



*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5g**

Cultural Sensitivity in the North County Coastal Land Use Plan

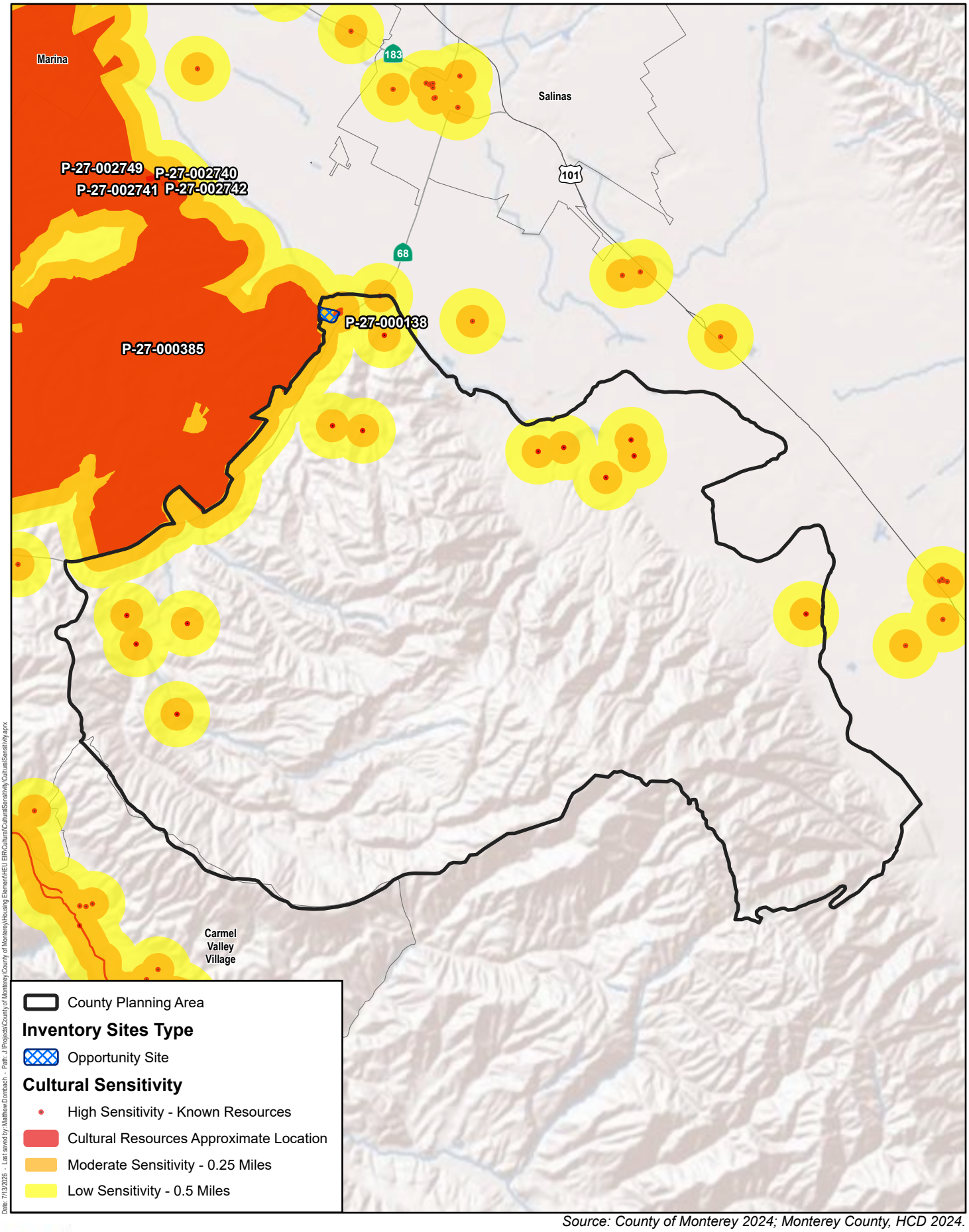



*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5h**

Cultural Sensitivity in the North County Inland Area Plan




*Source: County of Monterey 2024; Monterey County, HCD 2024.*

Harris & Associates

**Figure 5i**

Cultural Sensitivity in the Toro Area Plan

# Confidential Appendix B. CHRIS Background Data

**Under Separate Cover – See Confidential Appendices**

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# Confidential Appendix C. Sacred Lands File Search and Tribal Outreach

**Under Separate Cover – See Confidential Appendices**

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# Appendix D. Monterey County Register of Historic Resources

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# Monterey County Register of Historic Resources - Updated October 2025

| HISTORIC REGISTRY | NAME OF SITE | ADDRESS | APN | LOCAL_REG | CA_REG | NATIONAL_REG | MULTI_SITE | POTENTIAL | County Mills Act Contract | SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|
| CA Reg | Casa Materna of the Vallejos | 1000' N of inter. Hillcrest & Salinas Rd | 117-071-020-000 | | y | | | | | State |
| CA Reg | Battle of Natividad Site | | 211-223-002-000 | y | y | | | | | |
| CA Reg | Hilltown Ferry Site | | | y | y | | | | | |
| CA Reg | Carmel Valley Airport | 25790 Carmel Knolls Drive | 187-521-014-000 | y | y | | | | | |
| Local Reg | Old Stage Rd | | | y | | | | | | M.Clovis list |
| Local Reg | Bunte Store | 53475 Main St., San Lucas | 231-036-001-000 | y | | | N | | | historical.dbf |
| Local Reg | Boyd House | 53681 Main St., San Lucas | 231-036-002-000 | y | | | N | | | historical.dbf |
| Local Reg | Lockwood San Lucas Bridge (#406) | Salinas River Crossing | 231-051-012-000 | y | | | Y | | | historical.dbf |
| Local Reg | Paraiso Springs (demolished) | Paraiso Springs Road | 418-361-004-000 | y | | | N | | | historical.dbf |
| Local Reg | Elm Ave. Bridge (#320) | Arroyo Seco River Crossing | 419-101-062-000 | y | | | N | | | historical.dbf |
| Local Reg | Parkfield Coalinga Road Bridge (#434) | Little Cholame Creek | 423-173-006-000 | y | | | N | | | historical.dbf |
| Local Reg | Cholame Road Bridge (#440) | Cholame Creek | 423-173-050-000 | y | | | N | | | historical.dbf |
| Local Reg | Naciemento Lake Drive Bridge (#449) | San Antonio River | 424-091-017-000 | y | | | N | | | historical.dbf |
| Local Reg | Spreckels Historical District | | 000-000-000-000 | y | | | Y | | | M.Clovis list |
| Local Reg | Ellingwood Hay Barn (Red Barn) | 1000 Hwy. 101 | 141-013-005-000 | y | | | | | | M.Clovis list |
| Local Reg | Calvary Cemetery | Old Cemetery Rd | 207-011-018-000 | y | | | | | | M.Clovis list |
| Local Reg | Highlands Inn | | 241-121-003-000 | y | | | N | y | | M.Clovis list |
| Local Reg | Bay School | | 243-061-008-000 | y | | | N | | | M.Clovis list |
| Local Reg | Victorine Ranch | State Hwy. 1 | 243-211-019-000 | y | | | N | | | M.Clovis list |
| Local Reg | Door House | 24814 Pescadero Rd., Carmel | 009-122-002-000 | y | | | | | | M.Clovis list |
| Local Reg | Kuster-Meyer House | 2305 Bayview Ave., Carmel | 009-422-021-000 | y | | | | | | M.Clovis list |
| Local Reg | Carmel River Inn | 26600 Oliver Rd | 009-563-005-000 | y | | | | | | M.Clovis list |
| Local Reg | Louise G. Rose House | 165 Spindrift Rd., Carmel | 241-251-011-000 | y | | | | | | M.Clovis list |
| Local Reg | Butterfly House | 26320 Scenic Rd., Carmel | 009-443-002-000 | y | | | | | | M.Clovis list |
| Local Reg | Chimney Cottage | 1600 Vizcaino Rd., Pennle Beach | 008-201-002-000 | y | | | | | | M.Clovis list |
| Local Reg | Residence | 1666 San Juan Rd | 267-044-002-000 | y | | | | | | M.Clovis list |
| Local Reg | Old Pajaro School | 430 Salinas Rd | 117-301-002-000 | y | | | | | | M.Clovis list |
| Local Reg | Rowe House | 1767 San Juan Road | 267-041-005-000 | y | | | N | | | M.Clovis list |
| Local Reg | Pacific Coast Steamship Co. | 8122 Moss Landing Road | 133-212-007-000 | y | | | N | | | historical.dbf |
| Local Reg | East Garrison Historic District | | | y | | | | | | M.Clovis list |
| Local Reg | East Garrison Chapel | 16275 East Garrison Drive | 031-164-122-000 | y | | | | | | June 12, 2012 Board Order |
| Local Reg | Hovden Cannery | 7537 Sandholdt Rd | 133-241-018-000 | y | | | | | | M.Clovis list |
| Local Reg | Edward Phinet House | 100 Salinas Road | 117-352-001-000 | y | | | N | | | M.Clovis list |
| Local Reg | Moss Landing Post Office | | 133-211-003-000 | y | | | | | | M.Clovis list |
| Local Reg | Residence | 1372 San Juan Rd | 267-031-002-000 | y | | | N | | | M.Clovis list |
| Local Reg | Clough House | 1478 San Juan Road | 267-044-007-000 | y | | | N | | | M.Clovis list |
| Local Reg | Residence | 1615 San Juan Ro | 267-044-004-000 | y | | | N | | | M.Clovis list |
| Local Reg | Old Springfield School | | 412-031-003-000 | y | | | | | | M.Clovis list |
| Local Reg | Valley View Hotel | 540 Salinas Rd | 117-221-036-000 | y | | | | | | M.Clovis list |
| Local Reg | Old Chinese School | 18 Brooklyn Stre | 117-331-034-000 | y | | | N | | | M.Clovis list |
| Local Reg | Residence (Chinatown) | 26 Brooklyn Stre | 117-331-004-000 | y | | | N | | | M.Clovis list |
| Local Reg | Residence (Chinatown) | 22 Brooklyn Stre | 1173-310-036-000 | y | | | N | | | M.Clovis list |
| Local Reg | Fish Ranch Barn | | 243-081-008-000 | y | | | | | | M.Clovis list |
| Local Reg | Lowe's Station/Cemetary | 56789 Jolon Rd | 421-291-002-000 | y | | | Y | | | M.Clovis list |
| Local Reg | St. Lukes Church | | 201-021-001-000 | y | | | Y | | | historical.dbf |
| Local Reg | Hopper-Chanslor House | | 009-401-003-000 | y | | | N | | | historical.dbf |
| Local Reg | Beasley House | | 231-027-001-000 | y | | | N | | | historical.dbf |
| Local Reg | Farm Center | | 169-131-004-000 | y | | | N | | | historical.dbf |
| Local Reg | Robles Del Rio Lodge | | 189-441-008-000 | y | | | N | | | historical.dbf |
| Local Reg | Grimes Homestead | Palo Colorado & Coast Highway | 243-262-006-000 | y | | | N | | | historical.dbf |
| Local Reg | Wright Cabin | | 417-041-013-000 | y | | | Y | | | historical.dbf |
| Local Reg | San Carlos Ranch House | | 417-041-013-000 | y | | | Y | | | historical.dbf |
| Local Reg | Prince's Camp tavern | | 418-261-046-000 | y | | | | | | M.Clovis list |
| Local Reg | Idlewilde Hotel (Location approximate) | | | y | | | | | | M.Clovis list |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Local Reg | Manchester | | | y | | | M.Clovis list |
| Local Reg | Peel House | 24335 Washington St., Chualar | 145-051-005-000 | y | N | | M.Clovis list |
| Local Reg | Colton Home (Demolished) | 8670 River Meadows | 416-028-019-000 | y | | | M.Clovis list |
| Local Reg | Danish Community Church | 25694 Main St., Chualar | 145-052-011-000 | y | | | M.Clovis list |
| Local Reg | Enevoldsen House | 25655 Main St., Chualar | 145-051-004-000 | y | | | M.Clovis list |
| Local Reg | Dunn Adobe | 56023 Jolon Rd., King City | 421-111-057-000 | y | | | M.Clovis list |
| Local Reg | Fort Romie | | | y | | | M.Clovis list |
| Local Reg | Marks Ranch Hacienda | | | y | | | M.Clovis list |
| Local Reg | Onell House | 25574 Jackson St., Chualar | 145-056-006-000 | y | | | M.Clovis list |
| Local Reg | Carmel River Dam | | | y | | | M.Clovis list |
| Local Reg | Bell ranch | | | y | | | M.Clovis list |
| Local Reg | Miller Camp | | | y | | | M.Clovis list |
| Local Reg | Burritt Cahoon Home | | | y | | | M.Clovis list |
| Local Reg | Aromas Union School | 387 Blohm Ave., Aromas | 267-102-027-000 | y | | | M.Clovis list |
| Local Reg | Rock House | Nason Road | 418-191-079-000 | y | N | | historical.dbf |
| Local Reg | Molera Ranch | | 159-031-002-000 | y | | | M.Clovis list |
| Local Reg | Notley's Landing | | 243-262-007-000 | y | | | M.Clovis list |
| Local Reg | Palo Colorado School | | | y | | | M.Clovis list |
| Local Reg | Slate's Hot Springs (Esalen Institute) | | 421-011-005-000 | y | | | M.Clovis list |
| Local Reg | San Clemente Dam | | 417-051-005-000 | y | | | M.Clovis list |
| Local Reg | Tassajara Hot Springs Resort | | | y | | | M.Clovis list |
| Local Reg | Point Lobos Whaling Station & Co. | | | y | N | | M.Clovis list |
| Local Reg | Charles Bardin House | 425 W. Blanco Rd | 414-021-011-000 | y | | | M.Clovis list |
| Local Reg | China Camp | | 419-061-015-000 | y | | | M.Clovis list |
| Local Reg | Sir Harrie Downie House | 24416 San Marco Rd | 009-012-006-000 | y | | | M.Clovis list |
| Local Reg | Joan Baez House & Studio | 40 Miramonte Rd Carmel Valley, CA | 187-041-062-000 | y | | Y | M.Clovis list |
| Local Reg | Hatton Dairy Barn | 6540 Carmel Valley Rd. | 015-201-012-000 | y | | | M.Clovis list |
| Local Reg | Robinson Cyn Bridge #523 @ Garzas Cr | | | y | | | M.Clovis list |
| Local Reg | Chalk Rock House | 27200 Los Arboles Dr | 169-041-011-000 | y | | | M.Clovis list |
| Local Reg | Esquiline Rd Bridge, Bridge #508 | | | y | | | M.Clovis list |
| Local Reg | First Private School | 10780 McDougal St | 030-161-003-000 | y | N | | M.Clovis list |
| Local Reg | Juan Bautista Castro House | 10801 Merritt St | 030-163-013-000 | y | N | | M.Clovis list |
| Local Reg | Castroville School | 10700 Merritt St | 030-167-002-000 | y | N | | M.Clovis list |
| Local Reg | Native Sons of the Golden West | 10701 Merritt St | 030-162-009-000 | y | N | | M.Clovis list |
| Local Reg | Commercial Building | 10685 Merritt St | 030-161-012-000 | y | N | | M.Clovis list |
| Local Reg | J.B. Rogers-Cooper House | 10599 Merritt St | 030-125-003-000 | y | N | | M.Clovis list |
| Local Reg | Stafford House | | 165-012-001-000 | y | N | | historical.dbf |
| Local Reg | Weeks House | | 000-000-000-000 | y | N | | historical.dbf |
| Local Reg | Whisler House | | 243-061-003-000 | y | N | | historical.dbf |
| Local Reg | St. Lukes Church | | 231-037-004-000 | y | N | | historical.dbf |
| Local Reg | San Lucas School | | 231-034-003-000 | y | N | | historical.dbf |
| Local Reg | Carmel Valley Rock & Sand Co. | | 169-091-047-000 | y | N | | historical.dbf |
| Local Reg | Los Laureles Lodge | | 187-231-004-000 | y | N | | historical.dbf |
| Local Reg | Del Monte Milk Barn | | 189-291-005-000 | y | N | | historical.dbf |
| Local Reg | Sand Castles | | 161-551-002-000 | y | N | | historical.dbf |
| Local Reg | Rosies Cracker Barrel | | 189-331-011-000 | y | N | | historical.dbf |
| Local Reg | Aromas School | Carpenteria & Blohm | 267-102-002-000 | y | N | | historical.dbf |
| Local Reg | Carmelite Monastery | 27601 Coast Highway 1 | 243-101-002-000 | y | N | | historical.dbf |
| Local Reg | Schulte Road Bridge | Carmel River | 169-181-017-000 | y | N | | historical.dbf |
| Local Reg | Bridge #523 | Garzas Creek | 416-024-017-000 | y | N | | historical.dbf |
| Local Reg | Graves School | 15 McFadden Rd | 227-062-003-000 | y | | | M.Clovis list |
| Local Reg | Lagunita School | | | y | | | M.Clovis list |
| Local Reg | Natividad Town Site | | | y | | | M.Clovis list |
| Local Reg | Carmelo Coal Mine | | 243-211-001-000 | y | | | M.Clovis list |
| Local Reg | Olson ranch Historic District | paraiso Springs Rd., Soledad | 418-381-013-000 | y | | | M.Clovis list |
| Local Reg | George A. Born House | 3078 Bird Rock Rd., Pebble Beach | 007-411-001-000 | y | | | M.Clovis list |
| Local Reg | John S. Craven Gate House | 3350 17-Mile Dr., Pebble Beach | 008-423-039-000 | y | | | M.Clovis list |
| Local Reg | Prunedale Senior Citizens Center | 8300 Prunedale North Rd | 129-031-032-000 | y | | | M.Clovis list |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Local Reg | McCool House | 62397 Sargents Rd., San Ardo | 422-111-030-000 | y | | | | | | M.Clovis list |
| Local Reg | Cowley Place | 54668 Alber St., San Lucas | 231-028-007-000 | y | | | | | | M.Clovis list |
| Local Reg | Armer Place | 54680 Teresa St., San Lucas | 231-035-005-000 | y | | | | | | M.Clovis list |
| Local Reg | The Charles Moore House | 4175 Sunset Lane Pebble Beach, CA | 008-072-013-000 | y | | | | | y | RMA- Planning |
| Local Reg | The James E. Wansbrough House | 3035 Valdez Road Pebble Beach | 007-301-011-000 | y | | | | | y | RMA- Planning |
| Local Reg | The A.N. Nastovic House | 25227 Hatton Road, Carmel | 009-171-011-000 | y | | | | | y | RMA- Planning |
| Local Reg | The Alma Urmston House | 3191 Del Ciervo Road Pebble Beach, CA | 008-371-002-000 | y | | | | | y | RMA- Planning |
| Local Reg | Captain's Inn | 82122 Moss Landing Road, Moss Landing, CA | 133-212-007-000 | y | | | | | y | RMA- Planning |
| Local Reg | Roland W. White House | 978 Pioneer Road Pebble Beach, CA | 007-302-025-000 | y | | | | | | RMA- Planning |
| Local Reg | William Shaw House | 9260 Pias Ranch Rd | 419-251-018-000 | y | | | | | y | HCD-Planning |
| Local Reg | Forest Lodge Road House | 2852 Forest Lodge Rd | 007-192-009-000 | y | | | | | y | HCD-Planning |
| Local Reg | Rancho El Robledo | 8 Rancho el Robledo | 197-151-011-000 | y | | | | | y | HCD-Planning |
| Local Reg | Charles T. Nounnan House | 3080 Bird Rock Rd | 007-332-002-000 | y | | | | | y | HCD-Planning |
| Local Reg | Hayward House | 6 Miramonte Rd | 187-081-006-000 | y | | | | | y | HCD-Planning |
| Local Reg | Donald G. Thompson House | 51410 Partington Ridge Rd | 420-221-011-000 | y | | | | | y | HCD-Planning |
| Local Reg | Ferris Bagley House | 4161 Sunridge Rd | 008-071-011-000 | y | | | | | y | HCD-Planning, also includes apn -012 |
| Local Reg | June Haas House | 62 Yankee Point Drive | 243-152-005-000 | y | | | | | y | HCD-Planning |
| Local Reg | McDonald House | 55 Encina Drive | 187-041-042-000 | y | | | | | y | |
| National Reg | Rancho Las Palmas (Corey House) | 200 River Rd., Salinas | 139-221-024-000 | y | | y | N | | | historical.dbf |
| National Reg | Robinson Jeffers House (Tor House) | | 009-432-021-000 | y | | y | N | | | historical.dbf |
| National Reg | Flanders Mansion | | 010-061-005-000 | y | | y | N | | | historical.dbf |
| National Reg | Soledad Mission | | 165-022-002-000 | y | | y | N | | | historical.dbf |
| National Reg | Rancho San Lucas | | 233-031-008-000 | y | | y | | | | |
| National Reg | Los Coches Rancho (Adobe) | | 183-011-015-000 | y | y | y | N | | | historical.dbf |
| National Reg | Milpitas Ranchhouse | | 201-021-001-000 | y | | y | Y | | | historical.dbf |
| National Reg | Dutton Hotel | | 201-021-001-000 | y | | y | Y | | | historical.dbf |
| National Reg | Gill Adobe | | 201-021-001-000 | y | | y | Y | | | historical.dbf |
| National Reg | San Antonio de Padua Mission | | 201-021-002-000 | y | | y | N | | | historical.dbf |
| National Reg | Tidball Store | | 201-021-001-000 | y | | y | Y | | | historical.dbf |
| National Reg | Porter Vallejo Mansion | 29 Bishop St | 117-323-013-000 | y | | y | N | | | historical.dbf |
| National Reg | Olivida Penas | 1061 Majella Rd., Pebble Beach | 007-154-004-000 | | | y | N | | | historical.dbf |
| National Reg | Krough House | | 002-162-018-000 | | | y | N | | | historical.dbf |
| National Reg | Bontadelli House | | 002-251-017-000 | | | y | N | | | historical.dbf |
| National Reg | Larkin House | | 001-525-020-000 | | | y | N | | | historical.dbf |
| National Reg | Gabilan Lodge #372, Odd Fellows Hall | 117 Fourth St., Gonzales | 020-073-004-000 | y | | y | N | | | historical.dbf |
| National Reg | King City High School Auditorium | North Mildred Ave near Broadway | 026-061-001-000 | | | y | N | | | historical.dbf |
| National Reg | Monterey County Jail | 142 W. Alisal St., Salinas | 002-253-027-000 | | | y | | | | |
| National Reg | Monterey County Courthouse | 240 Church St., Salinas | 002-253-027-000 | | | y | | | | |
| National Reg | Monterey Old Town Historic District | | | | | y | | | | |
| National Reg | Josiah Merritt Adobe | 386 Pacific St., Monterey | 001-383-008-000 | | | y | | | | |
| National Reg | Asilomar Conference Grounds | 800 Asilomar Ave., Pacific Grove | 006-591-001-000 | | | y | | | | |
| National Reg | Republic Cafe | 37 Soledad St., Salinas | 002-191-012-000 | | | y | | | | |
| National Reg | U.S. Custom House | Calle Principalle @ Decatur St. | 000-000-000-000 | | | y | N | | | historical.dbf |
| National Reg | James W. Finch House | 410 Monroe St., Monterey | 001-391-032-000 | | | y | | | | |
| National Reg | G.T. Marsh & Sons | 599 Fremont St., Monterey | 001-728-005-000 | | | y | | | | |
| National Reg | Gosby House Inn | 643 Lighthouse Ave., Pacific Grove | 006-292-002-000 | | | y | | | | |
| National Reg | Mary C. W. Black, Studio House | 556 Abrego, Monterey | 001-696-009-000 | | | y | | | | |
| National Reg | Pacific Biological Laboratories | 800 Cannery Row, Monterey | 001-011-005-000 | | | y | | | | |
| National Reg | Stevenson House | 530 Houston St., Monterey | 001-691-006-000 | | | y | | | | |
| National Reg | Point Pinos Lighthouse | Asilomar Blvd & Lighthouse Ave | 007-011-006-000 | | | y | | | | |
| National Reg | Larkin House | 464 Calle Principale, Monterey | 001-534-007-000 | | | y | | | | |
| National Reg | Outlands in the Eighty Acres | 25800 Hatton Rd., Carmel | 010-061-006-000 | | | y | | | | |
| National Reg | Lou Ellen Parmelee House | 570 Archer St., Monterey | 001-098-004-000 | | | y | | | | |
| National Reg | Sunset Center | San Carlos St between 8th & 10th | 010-151-001-000 | | | y | N | | | historical.dbf |
| National Reg | Royal Presidio Chapel | 550 Church St., Monterey | 001-729-007-000 | | | y | | | | |
| National Reg | Samuel M. Black House | 418 Pajaro St., Salinas | 002-223-012-000 | | | y | | | | |
| National Reg | Frank LaVerne Buck House | 581 Pine Ave., Pacific Grove | 006-481-002-000 | | | y | | | | |
| National Reg | Centrella Hotel | 612 Central Ave., Pacific Grove | 002-112-011-000 | | | y | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| National Reg | Trimmer Hill | 230 6th St., Pacific Grove | 006-252-009-000 | | | y | | | | |
| National Reg | Jose Eusebio Boronda Adobe | Boronda Rd. & W Laurel Dr., Salinas | 227-011-013-000 | | | y | | | | |
| National Reg | USS Macon (airship remains) | address restricted | | | | y | | | | |
| National Reg | Cueva Pintada | King City, address restricted | | | | y | | | | |
| National Reg | Site Number 4 Mnt 85 | Greenfield, address restricted | | | | y | | | | |
| National Reg | Joseph W. Post House | Big Sur | 419-321-010-000 | y | | y | | | | |
| National Reg | Deetjen's Big Sur Inn | 48841 Hwy. 1, Big Sur | 420-181-004-000 | y | | y | | | | |
| National Reg | Kirk Creek Campground (site approximate) | Big Sur, address restricted | | | | y | | | | |
| National Reg | Whaler's Cabin | | 243-121-001-000 | y | | y | | | | |
| National Reg | Berwick Manor & Orchard | | 169-141-005-000 | y | | y | N | | | historical.dbf |
| National Reg | Point Sur Lighthouse | | 159-011-007-000 | y | y | y | N | | | historical.dbf |
| National Reg | Boronda Rd Eucalyptus Trees Row | Boronda Rd & Carmel Valley Rd | | y | | y | | | | historical.dbf |
| National Reg | Castroville Japanese Language School | 11199 Geil St | 030-102-001-000 | y | | y | N | | | historical.dbf |
| National Reg | Community Church of Gonzales | 301 4th St., Gonzales | 020-121-001-000 | y | | y | | | | |
| National Reg | Boronda Adobe | | 189-071-004-000 | y | y | y | N | | | historical.dbf |
| National Reg | Steinbeck House | | 002-162-015-000 | | | y | N | | | historical.dbf |
| National Reg | Sargent House | | 002-161-007-000 | | | y | N | | | historical.dbf |
| National Reg | Samuel Black House | | 002-352-008-000 | | | y | N | | | historical.dbf |
| National Reg | Nesbitt House | | 002-153-002-000 | | | y | N | | | historical.dbf |
| National Reg | Big  Sur Inn | | 420-181-002-000 | | | y | N | | | historical.dbf |
| National Reg | Finch House | | 001-391-032-000 | | | y | N | | | historical.dbf |
| National Reg | Community Church | | 020-122-001-000 | | | y | N | | | historical.dbf |
| National Reg | Carmel Mission | | 009-531-003-000 | y | | y | N | | | historical.dbf |
| Potential Reg | Joe Panziera Ranch | 36501 Arroyo Seco Rd.  lot A12 | 183-011-006-000 | | | | Y | y | | M.Clovis list |
| Potential Reg | Joe Panziera Ranch | 36501 Arroyo Seco Rd.  lot A13 | 183-011-006-000 | | | | Y | y | | M.Clovis list |
| Potential Reg | Jack's Dairy 11 | 36196 Doud Rd. | 183-011-007-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Petersen Dairy | 433 El Camino Real | 137-141-018-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Jacks Dairy 13 | 37722 Hwy 101 | 183-021-014-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Los Coches Ranch | Hwy 101 | 183-031-001-000 | | | | Y | y | | M.Clovis list |
| Potential Reg | Zani Ranch | 37801 & 37805 Los Coches Rd. | 183-021-033-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Guiotti Jack House | 37507 & 37501 Paraiso Rd. | 183-021-002-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Los Coches Farm HQ | 37061 Vida Rd. | 183-031-001-000 | | | | Y | y | | M.Clovis list |
| Potential Reg | Villa Munras | | 173-011-011-000 | | | | N | y | | historical.dbf |
| Potential Reg | Soberanes School | 88 Camphora Road | 165-011-009-000 | | | | N | y | | historical.dbf |
| Potential Reg | Farmstead | 20770 Buena Vista Road | 139-101-018-000 | | | | N | y | | historical.dbf |
| Potential Reg | Work Camp | 36571 Foothill Road | 165-091-002-000 | | | | N | y | | historical.dbf |
| Potential Reg | Dairy Farm | 27221 Old Stage Road | 223-031-005-000 | | | | N | y | | historical.dbf |
| Potential Reg | Dairy Farmstead | 29875 Tavernetti Road | 257-021-037-000 | | | | N | y | | historical.dbf |
| Potential Reg | Albertoni Dairy | 37221 Arroyo Seco Rd. | 183-011-008-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Albertoni Dairy | 37221 Arroyo Seco Rd. | 183-011-009-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Albertoni Dairy | 37221 Arroyo Seco Rd. | 183-011-010-000 | | | | N | y | | M.Clovis list |
| Potential Reg | Francisco Garcia Adobe | | 231-051-012-000 | | | | Y | y | | historical.dbf |
| Potential Reg | Old Carmelo School | | 169-041-005-000 | | | | N | y | | historical.dbf |
| Potential Reg | Marks Family Home | | 415-011-010-000 | | | | N | y | | historical.dbf |
| Potential Reg | Nowegian Chalet | | 161-221-010-000 | | | | N | y | | historical.dbf |
| Potential Reg | Dairy Farmstead | 93 Abbott Rd. | 139-101-031-000 | | | | N | y | | historical.dbf |
| Potential Reg | Farmstead | 280 Abbott St | 177-132-003-000 | | | | N | y | | historical.dbf |
| Potential Reg | Residence | 296 El Camino Real | 177-132-006-000 | | | | N | y | | historical.dbf |
| Potential Reg | Dairy Farmstead | 1600 Chualar | 269-012-001-000 | | | | N | y | | historical.dbf |
| Potential Reg | Farmstead | 27300 Fanoe Road | 223-031-026-000 | | | | N | y | | historical.dbf |
| Potential Reg | Dairy Farmstead | 24645 Foletta Rd | 145-011-028-000 | | | | N | y | | historical.dbf |
| Potential Reg | Soberanes Adobe | Rt 1 Box 64a Ft Romie Road | 257-061-006-000 | | | | N | y | | historical.dbf |
| Potential Reg | Jacks House | 26771 El Camino Real North | 269-061-008-000 | | | | N | y | | historical.dbf |
| Potential Reg | Soberanes Adobe | Rt 1 Box 84b Ft Romie Road | 165-011-003-000 | | | | N | y | | historical.dbf |
| Potential Reg | Farmstead | 33497 Ft. Romie Road | 165-011-004-000 | | | | N | y | | historical.dbf |
| Potential Reg | Soberanes Adobe | 32621 Ft. Romie Road | 165-011-005-000 | | | | Y | y | | historical.dbf |
| Potential Reg | Ranch House | 33421 Ft. Romie Road | 165-011-005-000 | | | | Y | y | | historical.dbf |
| Potential Reg | Ft. Romie Cottage | 37193 Foothill Road | 165-051-013-000 | | | | N | y | | historical.dbf |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Potential Reg | Ft. Romie Cottage | 37200 Foothill Road | 165-073-007-000 | | N | y | historical.dbf |
| Potential Reg | Dairy Farm | 37393 Foothill Road | 165-072-006-000 | | N | y | historical.dbf |
| Potential Reg | Farmstead | 32886 Highway 101 north | 257-082-011-000 | | N | y | historical.dbf |
| Potential Reg | Farmstead | 300 block River Road | 139-022-013-000 | | N | y | historical.dbf |
| Potential Reg | Farmstead | 435 River Road | 139-081-004-000 | | N | y | historical.dbf |
| Potential Reg | Dairy Farmstead | 800 River Road | 167-032-003-000 | | N | y | historical.dbf |
| Unknown | Bridge 507 | Boronda Rd. at C | | | N | | History.shp |
| Unknown | Tregea Ranch Structures | Carmel Valley Ro | | | N | | History.shp |
| Unknown | Pattee House | | 161-561-025-000 | | N | | historical.dbf |
| Unknown | Bixby Creek Bridge | Highway 1 & Bixby Creek | 000-000-000-000 | y | N | | historical.dbf |
| Unknown | Meadows Home | | 169-031-026-000 | | N | | historical.dbf |
| Unknown | Washington Union School House | | 151-041-005-000 | | N | | historical.dbf |
| Unknown | Grange | 518 River Road | 139-085-009-000 | | N | | historical.dbf |
| Unknown | Valley View Hotel | 540 Salinas Road | 117-271-011-000 | | N | | History.shp |

**NOTE: The Monterey County Regsiter of Historic Resources is regularly updated. Please contact the HRRB Secretary within the Housing and Community Development at (831) 784-5731**
**Last Updated on: 10/9/2025**

| Construction | Construction Activity | Source | CalEEMod CO2e (MT) | Fuel Type | Factor (kg CO2/gallon) | Gallons |
|---|---|---|---|---|---|---|
| Project Construction | Demolition | Offroad Equipment | 1248.2812 | Diesel | 10.21 | 122,261 |
| | | Hauling | - | Diesel | 10.21 | - |
| | | Vendor | 0 | Diesel | 10.21 | - |
| | | Worker | 38.60373 | Motor Gasoline | 8.78 | 4,397 |
| | Site Preparation | Offroad Equipment | 1159.159 | Diesel | 10.21 | 113,532 |
| | | Hauling | 0 | Diesel | 10.21 | - |
| | | Vendor | 0 | Diesel | 10.21 | - |
| | | Worker | 25.817 | Motor Gasoline | 8.78 | 2,940 |
| | Grading | Offroad Equipment | 3719.2633 | Diesel | 10.21 | 364,277 |
| | | Hauling | 3940.9492 | Diesel | 10.21 | 385,989 |
| | | Vendor | 0 | Diesel | 10.21 | - |
| | | Worker | 74.22883 | Motor Gasoline | 8.78 | 8,454 |
| | Paving | Offroad Equipment | 605.082 | Diesel | 10.21 | 59,264 |
| | | Vendor | 0 | Diesel | 10.21 | - |
| | | Hauling | 0 | Diesel | 10.21 | - |
| | | Worker | 38.29537 | Motor Gasoline | 8.78 | 4,362 |
| | Building Construction | Offroad Equipment | 2560.952 | Diesel | 10.21 | 250,828 |
| | | Hauling | 0 | Diesel | 10.21 | - |
| | | Vendor | 27923.33 | Diesel | 10.21 | 2,734,900 |
| | | Worker | 64323.67 | Motor Gasoline | 8.78 | 7,326,158 |
| | Architectural Coating | Offroad Equipment | 53.47656 | Diesel | 10.21 | 5,238 |
| | | Hauling | 0 | Diesel | 10.21 | - |
| | | Vendor | 0 | Diesel | 10.21 | - |
| | | Worker | 4594.342 | Motor Gasoline | 8.78 | 523,274 |

Source for conversion factor: U.S. Environmental Protection Agency. "Emissions Factors for Greenhouse Gas Inventories". Last Modified January 15, 2025.
1 MT = 1,000 kg

**Total Project Construction Fuel Use**

| | CO2e Emissions | Gallons |
|---|---|---|
| Diesel | 41,210 | 4,036,287 |
| Motor Gasoline | 69,095 | 7,869,585 |

-

| | Diesel | Gasoline |
|---|---|---|
| Gallons per Unit (12,479 units) | 323 | 631 |

**Operational Fuel Use**

| Net Change in VMT | Gallons/Day | Gallons/Year |
|---|---|---|
| 308,889 | 10,211 | 3,727,011 |
| Per Unit (12,479) | | 298.66 |

**EMFAC2025 V2.1.0 Data**

| Region | Calendar Year | Vehicle Category | Fuel | Total VMT | Fuel Consumption (1000 Gallons/day) |
|---|---|---|---|---|---|
| Monterey | 2031 | LDA | Gasoline | 3006980.739 | 107.4026085 |
| Monterey | 2031 | LDA | Diesel | 7338.952969 | 0.190447093 |
| Monterey | 2031 | LDA | Electricity | 499041.9179 | 0 |
| Monterey | 2031 | LDA | Plug-in Hybrid | 416360.6746 | 4.875020066 |
| Monterey | 2031 | LDA | Fuel Cell Electric Vehicle | 2583.952874 | 0 |
| Monterey | 2031 | LDT1 | Gasoline | 364956.1819 | 16.73562682 |
| Monterey | 2031 | LDT1 | Diesel | 0.106567932 | 5.15432E-06 |
| Monterey | 2031 | LDT1 | Electricity | 38158.86129 | 0 |
| Monterey | 2031 | LDT1 | Plug-in Hybrid | 28297.72705 | 0.381250596 |
| Monterey | 2031 | LDT1 | Fuel Cell Electric Vehicle | 226.8701781 | 0 |
| Monterey | 2031 | LDT2 | Gasoline | 2300000.892 | 97.42899825 |
| Monterey | 2031 | LDT2 | Diesel | 4670.125136 | 0.154827551 |
| Monterey | 2031 | LDT2 | Electricity | 39833.08284 | 0 |
| Monterey | 2031 | LDT2 | Plug-in Hybrid | 281000.354 | 3.90953471 |
| Monterey | 2031 | LDT2 | Fuel Cell Electric Vehicle | 817.2472482 | 0 |
| **Total for LD vehicles** | | | | **6,990,267.69** | **231.0783187** |
| **Total Fuel Consumption (gallons)/VMT per day** | | | | **0.03** | |

Harris & Associates

# GREENHOUSE GAS EMISSIONS TECHNICAL MEMORANDUM

**To:** County of Monterey
**From:** Sharon Toland, AICP, Senior Technical Specialist, Harris & Associates
**RE:** **Greenhouse Gas Emissions Technical Memorandum for the County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update**
**Date:** July 13, 2026
**CC:** Elizabeth Kim, Senior Project Manager, Harris & Associates
**Att:** 1, CalEEMod Results

## Introduction

This memorandum provides the results of Harris & Associates' analysis of the potential greenhouse gas (GHG) emissions impacts implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). The project area encompasses the unincorporated Monterey County (UMC), the geographic area overseen by the County and covered by the HEU6. Regional access to Monterey County is provided by the U.S. Route 101 traveling north–south and State Route (SR-) 198 and SR-146 running east–west. SR-1 also provides regional access along the Pacific coastline, and SR-218, SR-68, and SR-183 are other major roadways serving Monterey County.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

For the purposes of this analysis, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

The UMC is divided into seven sub-areas: North County, Greater Salinas, Central Salinas Valley, Greater Monterey Peninsula, Toro, Cachagua, and South County. Additionally, two master plans have been adopted in the Greater Monterey Peninsula Area Plan, the Carmel Valley Master Plan and the Fort Ord Master Plan, and the County's Local Coastal Program consists of four planning areas: North County—Coastal, Del Monte Forest, Carmel Area, and Big Sur Coast.

The HEU6 includes the capacity for at least 5,897 residential units, comprising opportunity sites (4,434 units), pipeline sites (1,117 units), and accessory dwelling units (346 units). Pipeline sites are sites where housing has been proposed and/or entitled, and where development is expected to receive a building permit or certificate of occupancy.

Accessory dwelling units would involve additional units on existing housing sites. For California Environmental Quality Act (CEQA) analysis, this GHG Emissions Technical Memorandum assumes both the theoretical maximum capacity of 12,497 new housing units on 56 opportunity sites, and a scenario that includes only the opportunity sites and accessory dwelling units (4,780 new housing units) is provided for informational purposes.

## Greenhouse Gas Analysis Background

A GHG is any gas that absorbs infrared radiation and traps heat in the atmosphere. GHGs are produced from natural processes and human activities. The accumulation of GHGs in the atmosphere influences the long-term atmospheric temperatures and contributes to global climate change. Carbon dioxide ($CO_2$) accounts for the largest amount of GHG emissions, and collectively, $CO_2$, methane ($CH_4$), and nitrous oxide ($N_2O$) amount to approximately 97 percent of total GHG emissions in the United States (USEPA 2023).

For each GHG, a global warming potential has been calculated to reflect how long emissions remain in the atmosphere and how strongly each GHG absorbs energy on a per-kilogram basis relative to $CO_2$. For example, 1 pound of $CH_4$ has 25 times more heat-capturing potential than 1 pound of $CO_2$. To simplify reporting and analysis, GHG emissions are typically reported in metric tons of carbon dioxide equivalent (MT $CO_2e$). Global warming potential is a metric that indicates the relative climate forcing of 1 kilogram of emissions when averaged over the period of interest. Table 1, Global Warming Potential for Select Greenhouse Gases, identifies the $CO_2e$ and atmospheric lifetimes of basic GHGs.

**Table 1. Global Warming Potential for Select Greenhouse Gases**

| Pollutant | Atmospheric Lifetime (years) | Global Warming Potential (100-year)[a] |
|---|---|---|
| $CH_4$ | 12 | 25 |
| $CO_2$ | ~100[b] | 1 |
| $N_2O$ | 121 | 298 |

**Source:** CAPCOA 2022.
**Notes:** $CH_4$ = methane; $CO_2$ = carbon dioxide; $N_2O$ = nitrous oxide
[a] The warming effects over a 100-year period relative to other GHGs.
[b] $CO_2$ has a variable atmospheric lifetime and cannot be readily approximated as a single number.

## Regulatory Setting

### Federal

The U.S. Environmental Protection Agency is responsible for implementing federal policy to address global climate change. In 2009, the U.S. Environmental Protection Agency issued a final rule for mandatory reporting of GHG emissions, which applies to fossil fuel and industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles, and requires annual reporting of emissions. This final rule does not regulate the emissions of GHGs; it only requires the monitoring and reporting of GHGs for the specified sources above certain thresholds.

### State

California has enacted various legislation related to climate change, much of which has set aggressive goals for GHG emissions reductions throughout the state. Executive Order S-03-05 (2005) established the goal of reducing GHG emissions to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. In September 2006, Governor Arnold Schwarzenegger signed California's Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), requiring the California Air Resources Board to establish a statewide GHG emissions cap for 2020 based on 1990 emissions and to adopt mandatory reporting rules for significant sources of GHG emissions. In April 2015, Governor Jerry Brown signed Executive Order B-30-15, which established the goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. This goal was set into law in Senate Bill 32. AB 1279, the California Climate Crisis Act, enacted in September 2022, updated the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and to achieve and maintain net-negative

GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below 1990 levels by 2045.

### Local

The County is currently preparing a Community Climate Action and Adaptation Plan (CCAAP). The CCAAP is an effort to reduce GHG emissions in line with the targets set by the State of California through 2045. Strategies to reduce GHG emissions are anticipated to include the following sectors: buildings and energy, including energy efficiency, clean energy, and electrification; on-road transportation, including land use planning, and clean and active transportation; off-road vehicles and equipment; solid waste; and water and wastewater. The CCAAP also includes actions for protecting natural and working lands, including urban forests and green spaces in developed lands. The strategies described in the CCAAP provide the County with a viable pathway to meet its climate goals of 28 percent reduction in 2030 and 66 percent reduction in 2040. The CCAAP provides progress toward but does not project achievement of the 2045 goal. The largest source of emissions in 2045 is anticipated to come from agricultural operations, primarily associated with grazing livestock, which is identified as providing value and benefits to the community, making operational changes to reduce emissions difficult. The County will continue to seek opportunities to maintain carbon held in natural and working lands to meet its long-term 2045 GHG reduction target. A community GHG emissions inventory has been completed as part of the effort (County of Monterey 2024). In 2019, community GHG emissions in the UMC were approximately 1,235,855 MT $CO_2e$. The highest contributor of GHG emissions was on-road transportation (39 percent of total emissions), followed by agriculture (32 percent), non-residential energy use (14 percent), and residential energy use (7 percent). The remaining 8 percent is attributable to solid waste, off-road vehicles and equipment, wastewater treatment, and water supply.

## Significance Thresholds

The County has not adopted a Climate Action Plan that meets the requirements for tiering in accordance with the CEQA Guidelines, Section 15183.5. Draft emissions reduction strategies and targets are not yet available for the County's Draft CCAAP. Additionally, the Monterey Bay Air Resources District has not adopted a numeric GHG threshold. GHG analysis guidance published by the state, MBARD, and City was reviewed and considered in determining an applicable standard for the project. Section 3.2 of Appendix D of the 2022 Scoping Plan, Evaluating Plan-Level and Project-Level Alignment with the State of California's Climate Goals in CEQA GHG Analyses, outlines three approaches to evaluating GHG emissions under CEQA: 2022 Scoping Plan Consistency, Net-Zero Emissions, and consistency with a threshold adopted by an applicable air district or agency. As previously noted, an adopted threshold is not available. The remaining two 2022 Scoping Plan approaches are evaluated below, as well as a review of bright-line thresholds and service population or per-capita thresholds.

### Bright-Line Thresholds

Numeric thresholds adopted by other agencies were considered as an option, including a threshold of 1,100 MT $CO_2e$ (annual emissions) adopted by the Sacramento Metropolitan Air Quality Management District and referenced in the 2017 Scoping Plan (CARB 2017). These so-called bright-line thresholds[1] address the state's long-term emissions reduction goals by determining a screening level under which a project would not be considered to hinder the state's ability to meet long-term goals. Bright-line thresholds are typically intended to screen out smaller projects with relatively minimal emissions so that the vast majority (typically 90 percent) of total future development would be subject to mitigation or project features that would reduce GHG emissions compared to business as usual (BAU) emissions and consistency with GHG reduction goals (CAPCOA 2008). These thresholds were ultimately rejected for the Threshold A analysis because they do not specifically address the contribution of emissions in Santa Cruz County to the current statewide AB 1279 goal.

[1] A bright-line threshold is a numeric threshold that provides a clearly defined rule to determine whether emissions are significant or less than significant and does not vary based on the size of type of project.

### Service Population or Per-Capita Thresholds

Numeric thresholds based on service population (defined as residents and employees) or per-capita thresholds are also acceptable per the 2017 Scoping Plan. However, the 2017 Scoping Plan has been replaced by the 2022 Scoping Plan, which does not include a revised per-capita target.

### Net-Zero Anthropogenic Emissions

A screening level of zero increase in anthropogenic emissions for ongoing, annual operational emissions compared to existing conditions is consistent with the Association of Monterey Bay Area Governments methodology for the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (SCS). A project that does not generate a net increase in anthropogenic GHG emissions would also be consistent with the overall goal of the 2022 Scoping Plan, which outlines a path for statewide carbon neutrality. Appendix D of the 2022 Scoping Plan, Local Actions, acknowledges that net-zero GHG emissions can be an appropriate target for individual projects. However, the 2022 Scoping Plan does not require or prioritize the use of a net-zero threshold. Due to the nature of the project to accommodate new land use development to support planned growth, and because the design of future projects is unknown, it was determined that a site-specific net-zero standard was appropriate for this plan-level analysis.

### Project Attributes for Residential to Qualitatively Determine Consistency with the Scoping Plan

This 2022 Scoping Plan approach is the first state-recommended approach for determining whether a proposed residential development would align with the State of California's climate goals. The focus of the approach is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan states that residential projects that have all of the key project attributes outlined in Scoping Plan Appendix D would accommodate growth in a manner consistent with state GHG reduction goals, specifically the attributes outlined in Table 3, Key Residential and Mixed-Use Project Attributes that Reduce Greenhouse Gases. As outlined in Section 3.2.1 of the 2022 Scoping Plan, these project attributes are intended as a guide to help local jurisdictions qualitatively identify those residential projects that are clearly consistent with the State of California's climate goals, since these attributes address the largest sources of operational emissions for residential projects. In general, residential and mixed-use development projects that incorporate all of the key project attributes are aligned with the State of California's Priority GHG Reduction Strategies for local climate action and with the State of California's climate and housing goals. As such, they are considered to be consistent with the 2022 Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs; therefore, the GHG emissions associated with such projects may result in a less than significant GHG impact under CEQA.

As such, absent an adopted local plan or threshold, the appropriate threshold for determining the significance of project GHG emissions is whether development under the project would conflict with key project attributes outlined in the 2022 Scoping Plan. As such, an inventory of project GHG emissions is provided below for informational purposes, and the significance of project emissions is evaluated through consistency with the 2022 Scoping Plan.

## Project Emissions Inventory

Project GHG emissions from construction and operation are inventoried for informational purposes below.

### Construction

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. The project is a land use plan and does not propose any specific construction projects, and the details of future construction under the HEU6 are currently unknown. Therefore, maximum daily construction emissions were estimated using CalEEMod default assumptions for construction of 12,497 residential units for the theoretical maximum buildout capacity, although it is highly unlikely, and a more likely 4,434 residential units under the reasonable capacity scenario has also been modeled. Construction assumes the planning period of 2023

to 2031. The recommended default assumption of 600 tons of export material per acre and 1,190 tons of import per acre was used to estimate total earthwork and demolition export for the project, based on the CalEEMod estimate for total project acreage (Ramboll 2023). Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results. Construction of the theoretical maximum buildout of 12,497 residential units is estimated to result in average annual construction emissions of 12,256 MT $CO_2$e per year between 2023 and 2031. In comparison, buildout of 4,434 residential units under the reasonable capacity scenario is estimated to result in average annual construction emissions of 4,484 MT $CO_2$e per year between 2023 and 2031.

## Operation

Project operation emissions were also estimated using CalEEMod, except mobile emissions, which were estimated using California Air Resources Board's (CARB's) Emissions Factor (EMFAC) model, as described further below. During operation, BAU buildout[2] under the HEU6 would result in area and indirect emission sources from electricity and natural gas consumption, water and wastewater transport, and solid waste generation. GHG emissions from electricity consumed on-site by the project would be generated off site by the electric provider through fuel combustion. GHG emissions from water and wastewater transport would be indirect emissions resulting from the energy required to transport water from its source and to treat wastewater and transport it to its treated discharge point. The net increase in annual operational emissions from HEU6 buildout conditions is based on CalEEMod default energy use estimates for Central Coast Community Energy and natural gas from Pacific Gas & Electric. CalEEMod default assumptions include natural gas hearths for new residential units. Energy use estimates are conservative because CalEEMod assumes compliance with 2019 Title 24 energy efficiency standards, whereas residential development associated with the HEU6 would be required to comply with increasingly stringent Title 24 Standards, including the current 2025 standards. Operational GHG emissions from these sources associated with the net increase in residential units accommodated by the project are shown in Table 2, Estimated Theoretical Maximum Capacity Project-Related Operation Greenhouse Gas Emissions, based on 12,497 housing units, and Table 3, Estimated Reasonable Capacity Project-Related Operation Greenhouse Gas Emissions, based on 4,434 housing units except mobile emissions. Mobile emissions under the reasonable capacity scenario used vehicle miles traveled (VMT) data based on the 4,910-unit scenario derived from a previous iteration of the traffic model. The reasonable capacity table is included for comparison purposes. The project impact analysis in this section is based on the theoretical maximum capacity of 12,497 units.

Development under the HEU6 would also generate mobile source emissions from motor vehicle trips. The project does not propose any specific future development projects; therefore, project-specific details are not provided. The project's impact related to mobile emissions is based on its impact on Monterey Countywide VMT data for existing (2023) and buildout (2031) conditions from Kimley-Horn (2026a). The net change in mobile emissions from buildout of the HEU6 was estimated using CARB's EMFAC2025 (V2.1.0) model. EMFAC2025 V2.1.0 reflects federal actions to disapprove the U.S. Environmental Protection Agency's (USEPA's) actions to grant California waivers for several regulations in the model, including Advanced Clean Cars II, Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions (Warranty Phase 1), and Heavy-Duty Omnibus (Omnibus), although these actions are being contested by the State of California (CARB 2026). Existing Monterey Countywide VMT is approximately 3,267,663 and is estimated to increase to 3,968,469 by 2031 without project implementation. With project implementation, the estimated Monterey Countywide VMT would be 4,277,358 in the buildout year of 2031.

[2] A BAU scenario is one that assumes no additional GHG reduction efforts beyond what have already been adopted and accounted for in CalEEMod. For example, CalEEMod estimates energy use based on 2019 consumption rates and projected 2025 Central Coast Community Energy emissions factors (CAPCOA 2022). It does not account for the 2022 Title 24 energy efficiency standards and future standards that have not yet been adopted.

**Table 2. Estimated Theoretical Maximum Capacity Project-Related Operation Greenhouse Gas Emissions**

| Emissions Source | Emissions (MT $CO_2e$) |
|---|---|
| Area and Refrigerants | 231 |
| Electricity | 7,808 |
| Natural Gas | 26,750 |
| Waste | 2,885 |
| Water | 1,210 |
| Mobile | 134 |
| **Total BAU Annual Operation Emissions** | **39,018** |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** BAU = business as usual; MT $CO_2e$ = metric tons of carbon dioxide equivalent

**Table 3. Estimated Reasonable Capacity Project-Related Operation Greenhouse Gas Emissions**

| Emissions Source | Emissions (MT $CO_2e$) |
|---|---|
| Area and Refrigerants | 82 |
| Electricity | 2,770 |
| Natural Gas | 9,491 |
| Waste | 1,024 |
| Water | 429 |
| Mobile | 89 |
| **Total BAU Annual Operation Emissions** | **13,885** |

**Source:** CAPCOA 2022. Refer to Attachment 1 for model output.
**Notes:** BAU = business as usual; MT $CO_2e$ = metric tons of carbon dioxide equivalent

# Impact Analysis

As shown in Tables 2 and 3, achieving either the Regional Housing Needs Allocation (RHNA) target or theoretical buildout of new residential units under the HEU6 would result in a net increase in operational GHG emissions compared to existing conditions. However, the estimated GHG emissions in Tables 2 and 3 are conservative and do not take into account that many opportunity sites are near existing development, which may result in fewer mobile emissions associated with VMT. Additionally, development would be subject to increasingly strict building standards that would reduce operational GHG emissions. The HEU6 would accommodate the County's RHNA target consistent with state housing goals. Although the project would require amendments to the County's Local Coastal Program, Monterey County General Plan (2010 General Plan), and Zoning Code to implement the HEU6, the project addresses projected housing needs to accommodate anticipated future growth, consistent with local and regional planning. Consequently, the project would not result in unplanned forecasted GHG emissions. The fundamental purpose of the HEU6 is to demonstrate how the County will accommodate the expected growth in housing needs over an 8-year planning period to comply with both state housing law and the final RHNA plan. Potential conflicts from implementing the HEU6 with the key strategies of the 2022 Scoping Plan and Appendix D, Local Actions, to achieve statewide GHG emissions reduction targets is addressed below.

## 2022 Scoping Plan

The 2022 Scoping Plan outlines a path for achieving carbon neutrality in accordance with AB 1279. The 2022 Scoping Plan recommends that local governments prioritize transportation electrification, VMT reduction, and building decarbonization (CARB 2022). Specifically, Appendix D, Local Actions, of the 2022 Scoping Plan outlines recommendations for local government action to be implemented at the plan level to facilitate 2022 Scoping Plan implementation. A key local action for the 2022 Scoping Plan implementation is preparation and implementation

of a local Climate Action Plan. As described previously, the County is currently preparing a CCAAP. However, the draft CCAAP has not yet been adopted. Adoption is anticipated during the 2023–2031 planning period. As such, individual future projects may be evaluated for consistency with the County's CCAAP and would be required to comply with applicable CCAAP policies or regulations. However, because a local plan has not been adopted at this time to address the County's fair share of GHG reductions under AB 1279, the project is evaluated for potential conflicts with the 2022 Scoping Plan goals and strategies. The GHG reduction goals and strategies for local jurisdictions identified in the 2022 Scoping Plan Appendix D fall into three categories: Transportation Electrification, VMT Reduction, and Building Decarbonization.

Development projects accommodated under the HEU6 are required to adhere to the programs and regulations identified by the 2022 Scoping Plan and implemented by state, regional, and local agencies to achieve the statewide GHG reduction goals of AB 1279. The Appendix D, Local Actions, of the 2022 Scoping Plan are not mandates for new development; however, these strategies represent the most applicable tool for evaluating project consistency with the 2022 Scoping Plan. Table 1 of the 2022 Scoping Plan Appendix D lists Priority GHG Reduction Strategies. The potential for the project to conflict with these strategies is discussed in Table 4, 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies.

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| **Transportation Electrification** | |
| Convert local government fleets to ZEVs and provide EV charging at public sites | **Not Applicable/No Conflict.** This strategy is not applicable to the project, which would facilitate the development of residential development to meet Monterey County's future housing needs. However, new single-family and two-family developments facilitated under the project would be required to install electric vehicle (EV) supply equipment (EVSE) in accordance with Section 4.106.4 of the California Green Building Standards Code (CALGreen; 2025 or most recent). For instance, new one- and two-family dwellings and townhouses with attached private garages must install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each new dwelling unit. In addition, any non-residential (mixed-use) development that may be facilitated by the project would be required to install EVSE in accordance with Section 5.106.5.3 of CALGreen, depending on the number of parking spaces provided. Additionally, new multi-family parking facilities are required to equip 40 percent of the total number of parking spaces with low-power Level 2 EV charging receptacles and 10 percent of the total number of parking spaces with Level 2 EV chargers in accordance with Section 4.106.4.2.2 of CALGreen. The development of new EV chargers would help support the County's conversion of fleets to zero-emission vehicles (ZEVs) by providing additional charging stations. Additionally, MBARD has adopted the Monterey Bay Plug-in Electric Vehicle Readiness Plan to support development of EV infrastructure regionally (CEC 2022). Further, implementation of Mitigation Measure (MM-) GHG-OBJ-1 and MM-GHG-CONS-2 would require that all future developments associated with the HEU6 provide EVSE that, at a minimum, meets the most ambitious voluntary standard in CALGreen at the time of project approval. |
| Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans) | |

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| **VMT Reduction** | |
| Reduce or eliminate minimum parking standards | **Potential Conflict.** Changes to parking requirements can only be implemented through updates to the Monterey County Code (County Code) and would apply to the entire UMC, which is beyond the HEU6's scope. However, the HEU6 does include some options to reduce parking below standards. Goal H-3 allows for adjusting parking standards for small developments below the Density Bonus law threshold when affordable units for the older adults or people with disabilities are provided. Goal H-5 allows for consideration of reduced parking as a development incentive to encourage the creation of affordable housing for special needs groups. Although the 2022 Scoping Plan encourages reducing parking requirements, this key project attribute could potentially conflict with the 2022 Scoping Plan priority to provide new EV charging stations. Therefore, MM-GHG-OBJ-1 and MM-GHG-CONS-2 both prioritize the provision of ample EV infrastructure and require that developments not provide more parking than the County's existing requirements. As such, the project would potentially conflict with this 2022 Scoping Plan strategy. |
| Implement Complete Streets policies and investments, consistent with general plan circulation element requirements | **No Conflict.** This strategy would be implemented by the County. Complete Streets are streets that are designed and operated to enable safe access for all users and for all modes of travel including non-motorized users and transit riders. Future development with 25 or more units associated with the project would require compliance with Section 20.64.250 and 21.64.250 of the County Code, which establishes requirements to reduce vehicle trips by ensuring that new developments, redevelopment, and expansion of existing developments contain infrastructure and programs to reduce vehicle travel and encourage alternative modes of travel. For instance, these sections require developers of applicable developments to submit a Trip Reduction Checklist with measures, such as providing ridesharing, installing bicycle amenities, and providing pedestrian facilities linking transit stops and common areas, as part of the ministerial or discretionary permit application materials for the proposed applicable development. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. Further, future development associated with the project would be required to evaluate consistency with the 2010 General Plan policies related to alternative transportation, such as Circulation Element Policies C-2.6, C-3.5, C-4.3, C-4.5, C-6.5, C-9.2, C-9.3, and C-9.6, which support the development and use of alternative transportation infrastructure. |
| Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, micro-transit, etc | **No Conflict.** Improving transit service frequencies, reducing fares, and creating bus priority lanes would be implemented by local transportation agencies. However, as described above, future development associated with the project would require compliance with Sections 20.64.250 and 21.64.250 of the County Code and applicable policies of the 2010 General Plan Circulation Element to support the development and use of alternative transportation infrastructure. This would allow the project to contribute its fair share to GHG reductions. |

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking | **No Conflict.** This strategy would be implemented by the County. As described above, Sections 20.64.250 and 21.64.250 of the County Code require a Trip Reduction Checklist to be submitted as part of the ministerial or discretionary permit application materials for future development with 25 or more units associated with the project. The Trip Reduction Checklist must include measures to reduce vehicle trips, such as providing ridesharing, park-and-ride facilities, carpools, and vanpools. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. This would allow the project to contribute its fair share to GHG reductions. |
| Implement parking pricing or transportation demand management pricing strategies | **Potential Conflict.** As described above, Sections 20.64.250 and 21.64.250 of the County Code require a Trip Reduction Checklist with transportation demand management measures to be submitted as part of the ministerial or discretionary permit application materials for future development with 25 or more units associated with the project. Transportation demand management measures to be included in the Trip Reduction Checklist could include providing ridesharing, installing bicycle amenities, and providing pedestrian facilities linking transit stops and common areas. The checklist and site development shall identify the proposed design elements and facilities that encourage alternative transportation usage by residents, employees, and customers of that development. This would allow the project to contribute its fair share to GHG reductions. Nevertheless, the project would not implement parking pricing or transportation demand management pricing strategies for all future development associated with the project; therefore, the project would potentially conflict with this 2022 Scoping Plan strategy. |
| Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood) | **No Conflict.** The proposed HEU6 would accommodate additional housing adjacent to the existing housing development. For example, Opportunity Sites 32 through 34 in the Central Salinas Valley Area Plan area and Opportunity Site 48 in the North County Coastal Land Use Plan area are near existing housing and schools. However, the sites are not necessarily near commercial or employment areas that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. For example, Opportunity Sites 40 and 45 are in an area with existing residential development in the Greater Monterey Peninsula Area Plan area, but not an existing commercial or employment center. Nevertheless, the project would amend the 2010 General Plan, Land Use Plans and Coastal Implementation Plans, and Zoning Ordinance to facilitate the development of mixed-use and higher density residential development. This would allow for more development in areas close to existing development and infrastructure to increase walkability and use of transit. |

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements) | **Potential Conflict.** The conversion of agricultural land as a result of the HEU6 is evaluated in Section 4.2, Agriculture and Forestry Resources, of the Program Environmental Impact Report (PEIR). As described therein, implementation of the project would result in the conversion of 0.16 percent of land identified as Important Farmland by the California Department of Conservation's Farming Mapping and Monitoring Program. In addition, buildout of the project would result in residential development on land that is currently zoned for uses that allow for agricultural activities, conservatively estimated as a loss of approximately 0.0003 percent of the total land zoned for agriculture in Monterey County. While these percentages are small, the impacts are considered to be potentially significant because the land would be permanently removed from the potential for agricultural production.<br>Chapter 21.92 of the County Code provides Regulations to Mitigate for Development on Farmland, including the requirement for a Farmland Mitigation Plan for any conversion of agricultural use to a non-agricultural use. There is no important farmland located on opportunity sites in the coastal zone. The Farmland Mitigation shall include Farmland Conservation Easements or Farmland Deed Restrictions, in-lieu fees, or alternative and complementary mitigation to the satisfaction of the Agricultural Advisory Committee. As evaluated in Section 4.2 of the PEIR, the only way to fully avoid impacts on important farmland and agriculturally zoned land would be to eliminate all opportunity sites on these lands. However, doing so would substantially reduce the flexibility for County decision-makers to meet regional housing needs and specific affordability targets. Therefore, impacts on agricultural resources would remain significant and unavoidable.<br>MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11 would require protective measures for sensitive plants, wildlife, vegetation communities, jurisdictional aquatic resources, and other habitat to avoid impacts on sensitive biological resources from future development. As described further in Section 4.4, Biological Resources, of the PEIR, implementation of these mitigation measures would mitigate all direct and indirect permanent and temporary impacts on biological resources to a less than significant level.<br>Further, the County is in the process of updating its 2010 General Plan Conservation and Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network.<br>It should also be noted that the HEU6 includes Policy H-3.2 "Place first priority on planning for residential growth in Community Areas near existing or planned infrastructure to ensure conservation of the County's agricultural and natural resources." Nevertheless, the significant and unavoidable impact on agricultural lands results in a potential conflict with this strategy. |

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| **Building Decarbonization** | |
| Adopt all-electric new construction reach codes for residential and commercial uses | **Partially Met.** AB 130 limits the County's ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP is not yet adopted, and the details of potential future restrictions are unknown. As such, the AB 130 limitation is assumed to be in place for the entirety of the HEU planning cycle. However, the goal of this strategy is to increase the use of electricity and reduce fossil fuel emissions. The primary energy provider for Monterey County, including the UMC, is Central Coast Community Energy (3CE), which has to comply with state renewable energy portfolio targets, including receiving 60 percent renewable energy by 2030 and zero carbon sources by 2045. Further, 3CE procures electricity from clean and renewable energy sources such as wind, solar, and geothermal, and purchases electricity from the grid to meet the energy demand. In addition, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency. The 2025 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen includes the use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities.<br>The County Code includes existing requirements to reduce energy use, including low-flow plumbing fixtures (Chapter 18.44, Residential and Commercial Water Conservation Measures) and renewable energy generation requirements for new structures greater than 25,000 square feet (Section 18.11.040, Renewable Energy Generation Requirements). In addition, the 2010 General Plan includes Goal OS-9 to promote efficient energy use and Policies OS-9.1 through OS-9.8 to support this strategy.<br>Also consistent with reducing energy use from reducing water usage, Chapter 16.63 (Standards for Landscaping) of the County Code requires drought-tolerant plants and other water conservation and energy efficiency measures for all landscapes. Project operations and waste management methods would be consistent with waste reduction and diversion requirements, such as Chapter 10.45 (Organic Waste Disposal Reduction) of the County Code and CALGreen construction and demolition recycling requirements.<br>The County has not adopted all-electric new construction standards, so this analysis identifies a partial conflict. If permissible under AB 130 and as a result of future CCAAP measures, the County may consider such requirements, which, if adopted, would result in a no conflict determination. |

**Table 4. 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies**

| Strategy/Action | Potential Conflicts |
|---|---|
| Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers) | **No Conflict.** This strategy would apply to existing buildings. Future development associated with the project may include renovations and expansion of existing development. Future development, redevelopment, and expansions would be required to comply with Title 24 energy standards for energy efficiency. The County Code required reduced energy use, including low-flow plumbing fixtures (Chapter 18.44, Residential and Commercial Water Conservation Measures) and renewable energy generation requirements for new structures greater than 25,000 square feet (Section 18.11.040, Renewable Energy Generation Requirements). In addition, the 2010 General Plan includes Goal OS-9 to promote efficient energy use and Policies OS-9.1 through OS-9.8 to support this strategy. |
| Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances | **No Conflict.** As described above, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency. The 2022 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen standards include electric heat pump and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities.<br>In addition, the primary energy provider for Monterey County is 3CE, which has to comply with state renewable energy portfolio targets, including receiving 60 percent renewable energy by 2030 and zero carbon sources by 2045. 3CE procures electricity from clean and renewable energy sources such as wind, solar, and geothermal. 3CE also purchases electricity from the grid to meet the energy demand. |
| Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing) | **No Conflict.** The proposed HEU6 would facilitate the development of residential development to meet Monterey County's future housing needs and would not conflict with future deployment of renewable energy production, distribution, and energy storage on privately owned land uses. As described above, future development associated with the project would be required to comply with the most recent Title 24 energy standards for renewable energy. For instance, all new single-family residential and multi-family residential buildings up to three habitable stories are required to install photovoltaic solar panels to meet energy demand. Therefore, all new developments associated with the project would require photovoltaic solar panels for renewable energy production and would not conflict with this strategy. This would allow the project to contribute its fair share to GHG reductions. |
| Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities<br>(e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings) | **Not Applicable.** This strategy is not applicable to the project, which would facilitate the development of private residential development to meet Monterey County's future housing needs. The project would not facilitate the development of new public facilities, such as municipal buildings. |

**Source:** CARB 2022.

In addition to the Priority GHG Reduction Strategies, Table 3 of the 2022 Scoping Plan Appendix D identifies key residential and mixed-use project attributes that reduce GHGs as a guide to identify if a development is clearly consistent with the State of California's climate goals. Table 5, 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes that Reduce Greenhouse Gases, evaluates whether future developments associated with the project would be able to meet the key residential and mixed-use project attributes that reduce GHGs identified in Table 3 of the 2022 Scoping Plan Appendix D.

**Table 5. 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes that Reduce Greenhouse Gases**

| Strategy/Action | Potential Conflicts |
|---|---|
| **Transportation Electrification** | |
| Provides EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in CALGreen at the time of project approval | **Met.** This would be required of future development associated with the project (refer to MM-GHG-OBJ-1 and MM-GHG-CONS-2). |
| **VMT Reduction** | |
| Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer) | **Partially Met.** The proposed HEU6 would accommodate additional housing adjacent to the existing housing development. However, although opportunity sites are near existing development, not all sites are necessarily near existing urban uses that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. Nevertheless, the project would amend the Local Coastal Plan, General Plan, and Zoning Ordinance to facilitate the development of mixed-use and higher density residential development and would allow for more development in areas close to existing development and infrastructure to increase walkability and use of transit. Identification of opportunity sites prioritized sites presently served by existing utilities and essential public services. |
| Does not result in the loss or conversion of natural and working lands | **Partially Met.** As described in Table 4, the conversion of agricultural land as a result of the project would result in significant and unavoidable impacts on agricultural land (refer to Section 4.2, Agriculture and Forestry Resources, of the PEIR). However, Chapter 21.92 of the County Code provides Regulations to Mitigate for Development on Farmland, including the requirement for a Farmland Mitigation Plan for any conversion of agricultural use to a non-agricultural use. There is no important farmland located on opportunity sites in the coastal zone. The Farmland Mitigation shall include Farmland Conservation Easements or Farmland Deed Restrictions, in-lieu fees, or alternative and complementary mitigation. In addition, the County is in the process of updating its 2010 General Plan Conservation and Open Space Element in compliance with Senate Bill 1425 to address climate resilience, equitable access to open space, and the preservation, enhancement, and expansion of an integrated open space network.<br>Further, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, and MM-BIO-CONS-11 would require protective measures for sensitive plants, wildlife, vegetation communities, jurisdictional aquatic resources, and other habitat to avoid impacts on sensitive biological resources from future development. As described further in Section 4.4, Biological Resources, of the PEIR, implementation of these mitigation measures would mitigate all direct and indirect permanent and temporary impacts on biological resources to a less than significant level. |

**Table 5. 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes that Reduce Greenhouse Gases**

| Strategy/Action | Potential Conflicts |
|---|---|
| Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's SCS | **Met.** The proposed zoning for all opportunity sites is HDR/205 or HDR/30(High Density Residential at 25 or 30 dwelling units per acre) except Opportunity Site 51, which is planned as Mixed-Use Zoning. Site 51 is within 0.5 mile of existing transit stops. These sites, however, would all consist of transit-supportive densities (a minimum of 20 residential dwelling units per acre). |
| Reduces parking requirements by:<br>○ Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or<br>○ Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or<br>○ For multi-family residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit | **Partially Met.** Changes to parking requirements can only be implemented through updates to the County's Code of Ordinances and would apply to the entire UMC, which is beyond the HEU6's scope. However, the HEU6 does include some options to reduce parking below standards. Goal H-3 allows for adjusting parking standards for small developments below the Density Bonus law threshold when affordable units for the older adults or people with disabilities are provided. Goal H-5 allows for consideration of reduced parking as a development incentive to encourage the creation of affordable housing for special needs groups. Although the 2022 Scoping Plan encourages reducing parking requirements, this key project attribute could potentially conflict with the 2022 Scoping Plan priority to provide new EV charging stations. Therefore, MM-GHG-OBJ-1 and MM-GHG-CONS-2 prioritize the provision of ample EV infrastructure and require that developments not provide more parking than the County's existing requirements. |
| At least 20 percent of units included are affordable to lower-income residents | **Met.** The project identifies sites for capacity of up to 999 units in the Extremely Low/Very Low-Income category and 726 units in the Low-Income category in opportunity sites. This represents 39 percent of the reasonable capacity total of 4,434 units planned for under the project in opportunity sites. Therefore, the project provides an opportunity for at least 20 percent of total units included under the HEU6 to be affordable to lower-income residents. |
| Results in no net loss of existing affordable units | **Met.** This would be required of future development associated with the project (refer to MM-GHG-OBJ-1 and MM-GHG-CONS-2). In addition, the proposed HEU6 identifies sites for capacity of up to 999 units in the Extremely Low/Very Low-Income category and 726 units in the Low-Income category. Further, the project includes housing policies and programs to facilitate the development of new units and preserve existing housing for residents at all income levels. |
| **Building Decarbonization** | |
| Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking | **Partially Met.** AB 130 limits the County's ability to update building codes to apply more restrictive standards to housing development, including green building standards, effective October 1, 2025, through June 1, 2031. As such, this limitation would be in place for the entirety of the HEU planning cycle. However, future development associated with the project would be required to comply with the most recent Title 24 energy standards for energy efficiency, which include increasingly stringent requirements on the use of natural gas. The 2022 Title 24 Energy Efficiency Standards require new single-family and multi-family residential to be electric-ready for heat pumps, cooktops, and clothes dryers. The 2025 CALGreen includes the use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in |

**Table 5. 2022 Scoping Plan Appendix D Key Residential and Mixed-Use Project Attributes that Reduce Greenhouse Gases**

| Strategy/Action | Potential Conflicts |
|---|---|
| | single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities.<br>The County has not adopted all-electric new construction standards, so this analysis identifies a partial conflict. If permissible under AB 130 and as a result of future CCAAP measures, the County may consider such requirements, which, if adopted, would result in a no conflict determination. |

**Source:** CARB 2022.

## Transportation Electrification

The provision of EV charging infrastructure is a project-specific design requirement. While EV charging infrastructure is required for new construction under CALGreen, additional requirements that meet the most ambitious voluntary standards in CALGreen may be incorporated into the County's Zoning Code or CCAAP. Unless and until this design requirement is codified, implementation of MM-GHG-OBJ-1 and MM-GHG-CONS-2 would require that all future developments associated with the HEU6 provide EVSE that, at a minimum, meets the most ambitious voluntary standard in CALGreen at the time of project approval. This would allow the project to contribute its fair share to GHG reductions. Additionally, the County has adopted the Zero Emissions Shared Mobility Study to identify innovative, accessible, and sustainable transportation options, especially for residents in low-income, rural, and historically underserved communities. This effort aims to address transportation gaps by exploring shared zero-emissions mobility solutions, such as e-bikesharing, ridesharing with EVs, car or van pooling, among others, that are reliable, affordable, and non-polluting. The project would not conflict with this County effort.

## VMT Reduction

Increased housing availability is a key focus of the 2022 Scoping Plan Appendix D. However, the focus of the 2022 Scoping Plan as it relates to housing is the opportunity for land use plans to eliminate barriers to infill development, such that meeting the ongoing need for additional housing is integrated with climate goals.[3] For instance, in Appendix D, CARB states, "In many cases, land use strategies that support more compact development in infill areas, particularly those already displaying efficient resident travel patterns, have the greatest potential to reduce emissions while also reducing combined housing and transportation costs for Californians and infrastructure costs for local governments due to avoided new roads, public schools, and other sprawl supporting infrastructure. Infill housing development alleviates pressure to develop on the urban periphery, preserving natural and working lands and areas often at risk of wildfire." However, the HEU6 must balance the need for infill development with the State of California's requirements for Affirmatively Furthering Fair Housing, which aims to combat housing discrimination, eliminate racial bias, undo historic patterns of segregation, and lift barriers that restrict access to foster inclusive communities and achieve racial equity, fair housing choice, and opportunity for all Californians. Additionally, the UMC is not urbanized, and there are not enough existing opportunities for infill development to meet RHNA targets. As described in Tables 4 and 5, while the proposed HEU6 would accommodate additional housing adjacent to existing housing development, the sites are not necessarily near commercial or employment areas that would result in mixed-use, walkable, and compact development consistent with the Scoping Plan vision for infill development. The site selection process for HEU6 prioritized sites near

[3] The 2022 Scoping Plan prioritizes "more compact, transportation-efficient development in infill areas and increasing transportation choices with the goal of reducing VMT" to reduce demand for transportation fuel, require less energy for buildings, and help to conserve natural and working lands that sequester carbon (CARB 2022).

existing development consistent with the State of California's infill priorities, but the project cannot demonstrate that all future development facilitated by the HEU6 would meet the 2022 Scoping Plan Appendix D key project attributes related to infill development.

The recommended target in the 2022 Scoping Plan Appendix D related to VMT is to reduce VMT per capita by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. The Draft Greenhouse Gas Emissions Inventory Report conducted for the County CCAAP calculated an annual VMT of 1,050,848,408 and a population of approximately 106,197 for the UMC in 2019, resulting in a daily VMT per capita of approximately 27 miles (County of Monterey 2024). The Transportation Analysis for the project determined that project VMT per capita would be 20.9 miles, and 31.7 miles per employee in 2031 (Kimley-Horn 2026b) under the theoretical maximum buildout capacity of 12,497 housing units. VMT would be reduced compared to 21.5 VMT/capita and 30.4 VMT/employee estimated for the year 2031 without project implementation. However, VMT per capita would not achieve the 30 percent reduction metric recommended by the 2022 Scoping Plan. Project VMT would also exceed the applicable Governor's Office of Land Use and Climate Innovation VMT guidelines, as outlined in the Transportation Analysis (Kimley-Horn 2026b). As such, the Transportation Analysis determined the impacts related to VMT would be significant. It therefore recommended VMT-reducing design principles such as transit-oriented development, and transportation demand management measures such as improved bicycle facilities. It should be noted that most of the housing units accommodated by the HEU6 would be within 0.5 mile of bicycle and/or transit facilities. However, the quality of these bicycle and transit facilities is often poor, with limited networks, connections, and hours of operation, as well as infrequent headways for transit service. Further, the effect of planned VMT-reducing design principles and future project-specific design features cannot be determined at the programmatic level. Consequently, the project's impact related to VMT would be significant and unavoidable (Kimley-Horn 2026b). As such, the HEU6 would potentially conflict with 2022 Scoping Plan priorities related to infill development and VMT reduction.

### Building Decarbonization

The use of electric appliances is a project-specific design requirement. The use of all-electric appliances may be incorporated into future applicable local or state regulations; however, as described in Table 4, AB 130 limits the County's ability to adopt a local decarbonization ordinance during the HEU6 planning cycle. The 2025 CALGreen standards include the use of electric heat pumps for heating and electric-ready requirements for kitchen appliances in single-family homes and increased electric-ready requirements for multi-family homes. Electric-ready appliances have the potential to be easily converted to electric in the future without requiring significant construction activities. Further, as described in Table 4, future development would be required to incorporate water conservation and renewable energy measures in accordance with the Monterey County Code (County Code), Chapter 18.44, Residential and Commercial Water Conservation Measures, and Section 18.11.040, Renewable Energy Generation Requirements. The County is exploring how restrictions on natural gas may be adopted as part of CCAAP implementation; however, the CCAAP is not yet adopted, and the details of potential future restrictions are unknown. If adopted, applicable natural gas regulations for CCAAP consistency would result in decarbonization efforts consistent with 2022 Scoping Plan priorities. However, because building a decarbonization mandate cannot be demonstrated to be implemented during the HEU6 planning cycle, there are potential conflicts with the 2022 Scoping Plan priorities related to building decarbonization.

### Summary

Given that the project would result in significant and unavoidable impacts related to agricultural resources and VMT, and is precluded by AB 130 from mandating building decarbonization, the project cannot demonstrate that it would result in no conflicts with all 2022 Scoping Plan Appendix D Priority GHG Reduction Strategies and key project attributes. Alternatively, the 2022 Scoping Plan notes that developments that result in net-zero GHG emissions would be considered to have a less than significant impact related to GHG emissions. However, this cannot be demonstrated at the programmatic level.

Until CARB's key project attributes are codified, future residential development under the HEU6 would need to demonstrate either no conflicts with the 2022 Scoping Plan key project attributes or net-zero GHG emissions to determine a less than significant impact related to GHG emissions. Since the project cannot demonstrate no conflicts with all 2022 Scoping Plan key project attributes or net-zero GHG emissions, the project's impact related to GHG emissions would be potentially significant.

## Mitigation Measures

Implementation of Mitigation Measure (MM-) GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 would result in implementation of key attributes outlined in the 2022 Scoping Plan Appendix D to the extent feasible.

AB 130 limits the County's ability to enact more restrictive standards for residential development to require implementation of the 2022 Scoping Plan key design features, including building decarbonization, Additionally, there are not enough sites available in the UMC that meet the 2022 Scoping Plan standards for infill and natural/working land requirements and also accommodate sufficient housing under the RHNA. MM-GHG-OBJ-1 and MM-GHG-CONS-2 include project design features based on the 2022 Scoping Plan Appendix D Table 3, Key Residential and Mixed-Use Project Attributes that Reduce GHGs). These features do not exceed the voluntary building standards that are codified under the California Green Building Standards Code and therefore do not put additional limitations on residential development that would conflict with AB 130.

However, not all future developments associated with the HEU6 would be able to individually demonstrate consistency with the key project attributes for infill sites surrounded by urban uses, no loss or conversion of natural and working lands, at least 20 percent affordable units, transit-supportive densities, and no use of natural gas. It would be infeasible to limit future residential development to sites that meet these criteria while also providing housing consistent with housing targets. However, it should be noted that although not all individual sites may achieve the 20 percent affordable unit target, the project as a whole plans for 39 percent of the opportunity site capacity to be affordable for low-income residents. In addition, changes to parking requirements can only be implemented through updates to the County Code. Such changes would apply to all development in the UMC[4], not only the potential development areas identified in the HEU6. As such, these requirements would be beyond the HEU6's scope.

Further, although the 2022 Scoping Plan encourages reducing parking requirements, this could potentially conflict with the key project attribute to provide new EV charging stations. Therefore, MM-GHG-OBJ-1 and MM-GHG-CONS-2 meet this key project attribute to the extent feasible by prioritizing the provision of ample EV infrastructure and requiring that developments do not provide more parking than the County's existing requirements. MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 would also reduce impacts related to the 2022 Scoping Plan consistency by reducing impacts on natural and working lands and VMT. However, impacts related to agricultural land and VMT would remain significant and unavoidable. Once adopted, the CCAAP would include additional actions that reduce GHG emissions in the UMC, but the timing of future residential development requirements is currently unknown.

Therefore, MM-GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 require implementation of the 2022 Scoping Plan key attributes to the extent feasible, but

[4] Opportunity Site 53 is in the City of Marina and standard Monterey County Code will not be applicable.

individual projects would potentially result in conflicts related to agricultural resources, VMT, and building decarbonization.

**MM-GHG-OBJ-1:** Prior to approval of a grading permit for new development streamlining under the Objective Process, developers shall demonstrate consistency with key project attributes based on the 2022 Scoping Plan Appendix D, Key Residential and Mixed-Use Project Attributes that Reduce GHGs (Table 3 of the 2022 Scoping Plan Appendix D).[5] The development shall either ensure consistency with all of the following key project attributes or identify and quantify project features that would result in equivalent GHG emissions reductions:

- Provides electric vehicle charging infrastructure that, at a minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval; and
- Does not provide parking beyond the minimum required parking; and
- Results in no net loss of existing affordable housing.

Final project design shall incorporate the above design measures or an equivalent GHG emissions reduction feature in the construction of the residential units. The County of Monterey shall ensure that these items are included in project construction documents.

**MM-GHG-CONS-2:** Future residential developments that would streamline under the Consistency Process shall demonstrate consistency with key project attributes based on the 2022 Scoping Plan Appendix D, Key Residential and Mixed-Use Project Attributes that Reduce GHGs (Table 3 of the 2022 Scoping Plan Appendix D).[6] The development shall either ensure consistency with all of the following key project attributes or identify and quantify project features that would result in equivalent GHG emissions reductions:

- Provides electric vehicle charging infrastructure that, at a minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval; and
- Does not provide parking beyond the minimum required parking; and
- Results in no net loss of existing affordable housing.

Final project design shall incorporate the above design measures or an equivalent GHG emissions reduction feature in the construction of the residential units. The County shall ensure that these items are included in project construction documents.

## Conclusion

Implementation of the project would result in a net increase in GHG emissions and would have the potential to result in conflicts with plan-level recommendations of the 2022 Scoping Plan related to infill development, VMT reduction, building decarbonization, and preserving natural and working lands. Future residential development would need to implement key project-specific design attributes to demonstrate consistency with statewide emissions reduction goals as outlined in the 2022 Scoping Plan. Implementation of MM-GHG-OBJ-1, MM-GHG-CONS-2, MM-AG-OBJ-1, MM-AG-CONS-2, MM-AG-OBJ-3, MM-AG-CONS-4, MM-AG-OBJ-5, MM-AG-CONS-6, MM-BIO-OBJ-1, MM-BIO-OBJ-2, MM-BIO-CONS-3 through MM-BIO-CONS-5, MM-BIO-OBJ-6, MM-BIO-CONS-7, MM-BIO-OBJ-8, MM-BIO-CONS-9, MM-BIO-CONS-10, MM-BIO-CONS-11, and MM-TRA-OBJ-1 would reduce impacts related to future development under the HEU6. However, GHG emissions related to VMT, natural gas use, and loss of agricultural land are not anticipated to be mitigated to less than significant impacts for all development under the HEU6. As such, the project would potentially conflict with these 2022 Scoping Plan priorities, and the project's impact related to GHG emissions would remain significant and unavoidable.

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# Attachment 1. CalEEMod Results

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# Monterey HEU - Max Capacity Detailed Report

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3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

3.7.3. Onsite - Mitigated

3.7.4. Offsite - Mitigated

3.8. Grading (2026)

3.8.1. Onsite - Unmitigated

3.8.2. Offsite - Unmitigated

3.8.3. Onsite - Mitigated

3.8.4. Offsite - Mitigated

3.9. Grading (2027)

3.9.1. Onsite - Unmitigated

3.9.2. Offsite - Unmitigated

3.9.3. Onsite - Mitigated

3.9.4. Offsite - Mitigated

3.10. Grading (2028)

3.10.1. Onsite - Unmitigated

3.10.2. Offsite - Unmitigated

3.10.3. Onsite - Mitigated

3.10.4. Offsite - Mitigated

3.11. Grading (2029)

3.11.1. Onsite - Unmitigated

3.11.2. Offsite - Unmitigated

3.11.3. Onsite - Mitigated

3.11.4. Offsite - Mitigated

3.12. Grading (2030)

3.12.1. Onsite - Unmitigated

3.12.2. Offsite - Unmitigated

3.12.3. Onsite - Mitigated

3.12.4. Offsite - Mitigated

3.13. Building Construction (2023)

3.13.1. Onsite - Unmitigated

3.13.2. Offsite - Unmitigated

3.13.3. Onsite - Mitigated

3.13.4. Offsite - Mitigated

3.14. Building Construction (2024)

3.14.1. Onsite - Unmitigated

3.14.2. Offsite - Unmitigated

3.14.3. Onsite - Mitigated

3.14.4. Offsite - Mitigated

3.15. Building Construction (2025)

3.15.1. Onsite - Unmitigated

3.15.2. Offsite - Unmitigated

3.15.3. Onsite - Mitigated

3.15.4. Offsite - Mitigated

3.16. Building Construction (2026)

3.16.1. Onsite - Unmitigated

3.16.2. Offsite - Unmitigated

3.16.3. Onsite - Mitigated

3.16.4. Offsite - Mitigated

3.17. Building Construction (2027)

3.17.1. Onsite - Unmitigated

3.17.2. Offsite - Unmitigated

3.17.3. Onsite - Mitigated

3.17.4. Offsite - Mitigated

3.18. Building Construction (2028)

3.18.1. Onsite - Unmitigated

3.18.2. Offsite - Unmitigated

3.18.3. Onsite - Mitigated

3.18.4. Offsite - Mitigated

3.19. Building Construction (2029)

3.19.1. Onsite - Unmitigated

3.19.2. Offsite - Unmitigated

3.19.3. Onsite - Mitigated

3.19.4. Offsite - Mitigated

3.20. Building Construction (2030)

3.20.1. Onsite - Unmitigated

3.20.2. Offsite - Unmitigated

3.20.3. Onsite - Mitigated

3.20.4. Offsite - Mitigated

3.21. Building Construction (2031)

3.21.1. Onsite - Unmitigated

3.21.2. Offsite - Unmitigated

3.21.3. Onsite - Mitigated

3.21.4. Offsite - Mitigated

3.22. Paving (2028)

3.22.1. Onsite - Unmitigated

3.22.2. Offsite - Unmitigated

3.22.3. Onsite - Mitigated

3.22.4. Offsite - Mitigated

3.23. Paving (2029)

3.23.1. Onsite - Unmitigated

3.23.2. Offsite - Unmitigated

3.23.3. Onsite - Mitigated

3.23.4. Offsite - Mitigated

3.24. Paving (2030)

3.24.1. Onsite - Unmitigated

3.24.2. Offsite - Unmitigated

3.24.3. Onsite - Mitigated

3.24.4. Offsite - Mitigated

3.25. Paving (2031)

3.25.1. Onsite - Unmitigated

3.25.2. Offsite - Unmitigated

3.25.3. Onsite - Mitigated

3.25.4. Offsite - Mitigated

3.26. Architectural Coating (2028)

3.26.1. Onsite - Unmitigated

3.26.2. Offsite - Unmitigated

3.26.3. Onsite - Mitigated

3.26.4. Offsite - Mitigated

3.27. Architectural Coating (2029)

3.27.1. Onsite - Unmitigated

3.27.2. Offsite - Unmitigated

3.27.3. Onsite - Mitigated

3.27.4. Offsite - Mitigated

3.28. Architectural Coating (2030)

3.28.1. Onsite - Unmitigated

3.28.2. Offsite - Unmitigated

3.28.3. Onsite - Mitigated

3.28.4. Offsite - Mitigated

3.29. Architectural Coating (2031)

3.29.1. Onsite - Unmitigated

3.29.2. Offsite - Unmitigated

3.29.3. Onsite - Mitigated

3.29.4. Offsite - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.2. Project Characteristics

8.2.1. Project Details

8.4. Construction

8.4.1. Construction Phases

8.4.4. Dust from Material Movement

8.4.7. On-Road Fugitive Dust

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Monterey HEU - Max Capacity |
| Construction Start Date | 1/2/2023 |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.80000 |
| Precipitation (days) | 27.6000 |
| Location | Monterey County, CA, USA |
| County | Monterey |
| City | Monterey |
| Air District | Monterey Bay ARD |
| Air Basin | North Central Coast |
| TAZ | 3238 |
| EDFZ | 6 |
| Electric Utility | Central Coast Community Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.43 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 6,000.00 | Dwelling Unit | 375.000 | 6,360,000 | 0.00000 | 0.00000 | 19,920.0 | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 6,000.00 | Dwelling Unit | 375.000 | 6,360,000 | 0.00000 | 0.00000 | 19,920.0 | — |
| Condo/Townhouse | 497.000 | Dwelling Unit | 31.0625 | 526,820 | 0.00000 | 0.00000 | 1,650.00 | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Energy | E-15 | Require All-Electric Development |

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 449.944 | 139.361 | 533.324 | 0.35702 | 3.22971 | 84.6791 | 86.7225 | 3.01031 | 21.9160 | 24.9263 | — | 115,965 | 115,965 | 5.92229 | 7.71288 | 381.211 | 118,717 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 448.921 | 151.598 | 508.779 | 0.35702 | 3.22971 | 84.6791 | 86.7225 | 3.01031 | 21.9160 | 24.9263 | — | 111,763 | 111,763 | 6.59658 | 7.95132 | 9.86793 | 114,250 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 318.884 | 103.679 | 347.396 | 0.25418 | 2.28661 | 59.4776 | 60.8568 | 2.13152 | 15.2398 | 17.3713 | — | 78,545.8 | 78,545.8 | 4.44550 | 5.53161 | 117.184 | 80,351.6 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 58.1963 | 18.9214 | 63.3997 | 0.04639 | 0.41731 | 10.8547 | 11.1064 | 0.38900 | 2.78126 | 3.17027 | — | 13,004.2 | 13,004.2 | 0.73600 | 0.91582 | 19.4011 | 13,303.1 |

### 2.2. Construction Emissions by Year

## 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 54.2650 | 117.608 | 533.324 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 100,716 | 100,716 | 5.54497 | 6.68886 | 381.211 | 103,229 |
| 2024 | 50.0835 | 108.744 | 495.737 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 99,064.2 | 99,064.2 | 5.28738 | 6.68887 | 359.685 | 101,549 |
| 2025 | 47.5663 | 100.901 | 460.546 | 0.23351 | 1.70452 | 67.0613 | 68.7658 | 1.59657 | 16.0021 | 17.5986 | — | 97,307.3 | 97,307.3 | 5.08867 | 6.51127 | 337.650 | 99,712.6 |
| 2026 | 49.7455 | 139.361 | 472.192 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 111,202 | 111,202 | 5.83079 | 7.71288 | 326.058 | 113,972 |
| 2027 | 45.6569 | 132.101 | 444.671 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 109,290 | 109,290 | 5.42452 | 7.29209 | 298.123 | 111,897 |
| 2028 | 449.944 | 110.393 | 469.115 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 115,965 | 115,965 | 5.92229 | 7.68306 | 314.525 | 118,717 |
| 2029 | 447.904 | 103.739 | 442.216 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 113,778 | 113,778 | 3.62894 | 7.50544 | 285.877 | 116,391 |
| 2030 | 445.550 | 98.2855 | 418.532 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 111,618 | 111,618 | 3.16634 | 7.46144 | 258.516 | 114,179 |
| 2031 | 440.754 | 64.4766 | 364.504 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 96,688.1 | 96,688.1 | 2.60094 | 6.23060 | 223.794 | 98,833.7 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 51.6694 | 129.487 | 508.779 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 96,814.0 | 96,814.0 | 6.11161 | 6.88756 | 9.86793 | 99,029.1 |
| 2024 | 49.0228 | 120.247 | 473.231 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 95,253.8 | 95,253.8 | 6.11163 | 6.68887 | 9.32469 | 97,409.2 |
| 2025 | 50.3829 | 151.598 | 473.040 | 0.34063 | 3.07147 | 72.6384 | 75.7099 | 2.86472 | 17.9721 | 20.8369 | — | 107,455 | 107,455 | 6.59658 | 7.69915 | 9.17441 | 109,924 |
| 2026 | 48.8516 | 149.130 | 452.984 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 107,555 | 107,555 | 6.39892 | 7.71508 | 8.44658 | 110,022 |
| 2027 | 44.7630 | 141.659 | 426.414 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 105,718 | 105,718 | 6.01990 | 7.49129 | 7.74924 | 108,109 |
| 2028 | 448.921 | 121.220 | 451.173 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 111,763 | 111,763 | 4.37717 | 7.95132 | 8.13879 | 114,250 |
| 2029 | 446.613 | 114.404 | 423.638 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 109,660 | 109,660 | 4.10657 | 7.77370 | 7.41466 | 112,087 |
| 2030 | 445.243 | 108.713 | 401.343 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 107,580 | 107,580 | 3.88278 | 7.70026 | 6.70448 | 109,978 |
| 2031 | 439.980 | 74.7193 | 346.948 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 92,723.5 | 92,723.5 | 3.07768 | 6.46898 | 5.79734 | 94,734.0 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 37.6218 | 89.8471 | 347.396 | 0.16632 | 1.50170 | 46.9365 | 48.4381 | 1.40180 | 11.1904 | 12.5922 | — | 69,165.8 | 69,165.8 | 4.23292 | 4.76467 | 117.184 | 70,808.7 |
| 2024 | 34.8336 | 83.5950 | 323.762 | 0.16724 | 1.37047 | 47.1943 | 48.5648 | 1.28118 | 11.2519 | 12.5331 | — | 68,424.2 | 68,424.2 | 4.09277 | 4.79085 | 111.093 | 70,065.3 |
| 2025 | 33.1914 | 78.7959 | 302.576 | 0.17329 | 1.30044 | 47.4021 | 48.7025 | 1.21734 | 11.3403 | 12.5576 | — | 67,881.3 | 67,881.3 | 3.96183 | 4.72297 | 104.848 | 69,492.6 |
| 2026 | 34.4682 | 103.679 | 311.239 | 0.25418 | 2.28661 | 56.1262 | 58.4128 | 2.13152 | 15.2398 | 17.3713 | — | 76,918.2 | 76,918.2 | 4.44550 | 5.50839 | 100.546 | 78,771.4 |
| 2027 | 31.6661 | 97.0858 | 291.903 | 0.25205 | 2.09931 | 56.0451 | 58.1444 | 1.95920 | 15.1998 | 17.1590 | — | 75,371.1 | 75,371.1 | 4.14573 | 5.34800 | 92.0077 | 77,160.5 |
| 2028 | 199.608 | 80.1957 | 288.005 | 0.22726 | 1.38300 | 56.0931 | 57.4761 | 1.30027 | 13.8108 | 15.1111 | — | 76,289.7 | 76,289.7 | 2.66608 | 5.53082 | 91.8233 | 78,096.3 |
| 2029 | 318.884 | 78.9440 | 291.468 | 0.23127 | 1.37917 | 59.4776 | 60.8568 | 1.26525 | 14.6013 | 15.8666 | — | 78,545.8 | 78,545.8 | 2.76268 | 5.53161 | 88.2607 | 80,351.6 |
| 2030 | 316.866 | 67.7569 | 267.502 | 0.20549 | 1.08624 | 58.1417 | 59.2280 | 1.00381 | 14.1288 | 15.1326 | — | 73,923.0 | 73,923.0 | 2.29605 | 5.07608 | 78.8356 | 75,571.9 |
| 2031 | 252.576 | 49.0219 | 229.288 | 0.15240 | 0.55101 | 53.7164 | 54.2674 | 0.40037 | 12.7783 | 13.1787 | — | 64,513.2 | 64,513.2 | 1.96980 | 4.37325 | 66.9283 | 65,932.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.86598 | 16.3971 | 63.3997 | 0.03035 | 0.27406 | 8.56590 | 8.83996 | 0.25583 | 2.04225 | 2.29808 | — | 11,451.2 | 11,451.2 | 0.70081 | 0.78885 | 19.4011 | 11,723.2 |
| 2024 | 6.35713 | 15.2561 | 59.0865 | 0.03052 | 0.25011 | 8.61297 | 8.86308 | 0.23382 | 2.05348 | 2.28729 | — | 11,328.4 | 11,328.4 | 0.67761 | 0.79318 | 18.3927 | 11,600.1 |
| 2025 | 6.05743 | 14.3803 | 55.2201 | 0.03163 | 0.23733 | 8.65088 | 8.88821 | 0.22216 | 2.06960 | 2.29176 | — | 11,238.5 | 11,238.5 | 0.65593 | 0.78194 | 17.3588 | 11,505.3 |
| 2026 | 6.29044 | 18.9214 | 56.8012 | 0.04639 | 0.41731 | 10.2430 | 10.6603 | 0.38900 | 2.78126 | 3.17027 | — | 12,734.7 | 12,734.7 | 0.73600 | 0.91198 | 16.6465 | 13,041.5 |
| 2027 | 5.77906 | 17.7182 | 53.2723 | 0.04600 | 0.38312 | 10.2282 | 10.6113 | 0.35755 | 2.77397 | 3.13152 | — | 12,478.5 | 12,478.5 | 0.68637 | 0.88542 | 15.2329 | 12,774.8 |
| 2028 | 36.4285 | 14.6357 | 52.5609 | 0.04147 | 0.25240 | 10.2370 | 10.4894 | 0.23730 | 2.52047 | 2.75777 | — | 12,630.6 | 12,630.6 | 0.44140 | 0.91569 | 15.2024 | 12,929.7 |
| 2029 | 58.1963 | 14.4073 | 53.1929 | 0.04221 | 0.25170 | 10.8547 | 11.1064 | 0.23091 | 2.66474 | 2.89565 | — | 13,004.2 | 13,004.2 | 0.45739 | 0.91582 | 14.6126 | 13,303.1 |
| 2030 | 57.8280 | 12.3656 | 48.8191 | 0.03750 | 0.19824 | 10.6109 | 10.8091 | 0.18319 | 2.57850 | 2.76169 | — | 12,238.8 | 12,238.8 | 0.38014 | 0.84040 | 13.0521 | 12,511.8 |
| 2031 | 46.0952 | 8.94649 | 41.8451 | 0.02781 | 0.10056 | 9.80325 | 9.90381 | 0.07307 | 2.33204 | 2.40511 | — | 10,680.9 | 10,680.9 | 0.32612 | 0.72404 | 11.0807 | 10,915.9 |

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 3.52486 | 32.6394 | 32.9632 | 0.05591 | 1.34932 | 0.00000 | 1.34932 | 1.24138 | 0.00000 | 1.24138 | — | 5,822.67 | 5,822.67 | 0.23619 | 0.04724 | 0.00000 | 5,842.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 6.72163 | 62.3177 | 61.2732 | 0.11684 | 2.58430 | 3.63748 | 6.22178 | 2.37755 | 1.43225 | 3.80980 | — | 12,421.5 | 12,421.5 | 0.50387 | 0.10077 | 0.00000 | 12,464.2 |
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 2.73507 | 25.8641 | 24.9658 | 0.04004 | 1.11606 | 0.00000 | 1.11606 | 1.02678 | 0.00000 | 1.02678 | — | 4,170.59 | 4,170.59 | 0.16918 | 0.03384 | 0.00000 | 4,184.90 |
| 2025 | 2.71169 | 25.1143 | 25.2626 | 0.04363 | 1.03872 | 0.22067 | 1.25939 | 0.95562 | 0.08689 | 1.04251 | — | 4,559.37 | 4,559.37 | 0.18495 | 0.03699 | 0.00000 | 4,575.02 |
| 2026 | 5.14130 | 46.8832 | 49.0335 | 0.09433 | 1.93864 | 7.68402 | 9.62265 | 1.78354 | 3.63682 | 5.42036 | — | 10,114.6 | 10,114.6 | 0.41029 | 0.08206 | 0.00000 | 10,149.3 |
| 2027 | 4.83418 | 43.2627 | 47.2122 | 0.09220 | 1.75133 | 7.60901 | 9.36033 | 1.61122 | 3.59827 | 5.20949 | — | 9,887.87 | 9,887.87 | 0.40110 | 0.08022 | 0.00000 | 9,921.81 |
| 2028 | 170.798 | 26.9318 | 33.3427 | 0.06697 | 1.03406 | 2.60532 | 3.63938 | 0.95134 | 1.02584 | 1.97717 | — | 7,131.83 | 7,131.83 | 0.28930 | 0.05786 | 0.00000 | 7,156.31 |
| 2029 | 289.259 | 27.5464 | 36.2855 | 0.07142 | 1.03119 | 2.59820 | 3.62939 | 0.94869 | 1.02303 | 1.97173 | — | 7,597.93 | 7,597.93 | 0.30821 | 0.06164 | 0.00000 | 7,624.00 |
| 2030 | 288.510 | 21.3003 | 29.7782 | 0.05676 | 0.77003 | 1.72264 | 2.49267 | 0.70843 | 0.67828 | 1.38671 | — | 6,010.16 | 6,010.16 | 0.24380 | 0.04876 | 0.00000 | 6,030.78 |
| 2031 | 226.746 | 9.68912 | 15.3674 | 0.02555 | 0.29730 | 0.00000 | 0.29730 | 0.27351 | 0.00000 | 0.27351 | — | 2,638.66 | 2,638.66 | 0.10704 | 0.02141 | 0.00000 | 2,647.72 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.49915 | 4.72019 | 4.55625 | 0.00731 | 0.20368 | 0.00000 | 0.20368 | 0.18739 | 0.00000 | 0.18739 | — | 690.488 | 690.488 | 0.02801 | 0.00560 | 0.00000 | 692.858 |
| 2025 | 0.49488 | 4.58336 | 4.61042 | 0.00796 | 0.18957 | 0.04027 | 0.22984 | 0.17440 | 0.01586 | 0.19026 | — | 754.856 | 754.856 | 0.03062 | 0.00612 | 0.00000 | 757.447 |
| 2026 | 0.93829 | 8.55618 | 8.94862 | 0.01722 | 0.35380 | 1.40233 | 1.75613 | 0.32550 | 0.66372 | 0.98922 | — | 1,674.59 | 1,674.59 | 0.06793 | 0.01359 | 0.00000 | 1,680.34 |
| 2027 | 0.88224 | 7.89543 | 8.61624 | 0.01683 | 0.31962 | 1.38864 | 1.70826 | 0.29405 | 0.65668 | 0.95073 | — | 1,637.05 | 1,637.05 | 0.06641 | 0.01328 | 0.00000 | 1,642.67 |
| 2028 | 31.1706 | 4.91506 | 6.08505 | 0.01222 | 0.18872 | 0.47547 | 0.66419 | 0.17362 | 0.18721 | 0.36083 | — | 1,180.76 | 1,180.76 | 0.04790 | 0.00958 | 0.00000 | 1,184.81 |
| 2029 | 52.7897 | 5.02722 | 6.62211 | 0.01303 | 0.18819 | 0.47417 | 0.66236 | 0.17314 | 0.18670 | 0.35984 | — | 1,257.92 | 1,257.92 | 0.05103 | 0.01021 | 0.00000 | 1,262.24 |
| 2030 | 52.6532 | 3.88731 | 5.43453 | 0.01036 | 0.14053 | 0.31438 | 0.45491 | 0.12929 | 0.12379 | 0.25307 | — | 995.050 | 995.050 | 0.04036 | 0.00807 | 0.00000 | 998.465 |
| 2031 | 41.3811 | 1.76826 | 2.80456 | 0.00466 | 0.05426 | 0.00000 | 0.05426 | 0.04992 | 0.00000 | 0.04992 | — | 436.861 | 436.861 | 0.01772 | 0.00354 | 0.00000 | 438.360 |

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 50.1630 | 78.4514 | 496.664 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 94,893.4 | 94,893.4 | 5.30878 | 6.64163 | 381.211 | 97,386.6 |
| 2024 | 46.2649 | 72.6334 | 460.880 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 93,241.3 | 93,241.3 | 5.05118 | 6.64163 | 359.685 | 95,706.5 |
| 2025 | 44.0414 | 68.2618 | 427.583 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 91,484.7 | 91,484.7 | 4.85248 | 6.46403 | 337.650 | 93,869.9 |
| 2026 | 42.4866 | 73.1182 | 402.847 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 96,908.0 | 96,908.0 | 5.25097 | 7.59692 | 326.058 | 99,629.2 |
| 2027 | 38.6299 | 69.1580 | 376.172 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 94,997.0 | 94,997.0 | 4.84473 | 7.17614 | 298.123 | 97,554.7 |
| 2028 | 44.8523 | 69.7032 | 417.983 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 105,325 | 105,325 | 5.49067 | 7.59673 | 314.525 | 108,040 |
| 2029 | 42.9418 | 65.1742 | 391.417 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 103,141 | 103,141 | 3.19746 | 7.41914 | 285.877 | 105,718 |
| 2030 | 40.7190 | 61.1645 | 367.795 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 100,981 | 100,981 | 2.73485 | 7.37515 | 258.516 | 103,506 |
| 2031 | 38.6831 | 49.4558 | 340.672 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 92,647.2 | 92,647.2 | 2.43702 | 6.19782 | 223.794 | 94,778.8 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 47.5674 | 90.3301 | 472.119 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 90,991.4 | 90,991.4 | 5.87543 | 6.84033 | 9.86793 | 93,186.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 45.2042 | 84.1358 | 438.375 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 89,430.9 | 89,430.9 | 5.87543 | 6.64163 | 9.32469 | 91,566.3 |
| 2025 | 43.6613 | 89.2799 | 411.766 | 0.22379 | 0.48717 | 69.0009 | 69.4881 | 0.48717 | 16.5399 | 17.0271 | — | 95,033.7 | 95,033.7 | 6.09271 | 7.59838 | 9.17441 | 97,459.5 |
| 2026 | 41.5927 | 82.8875 | 383.639 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 93,261.1 | 93,261.1 | 5.81911 | 7.59912 | 8.44658 | 95,679.6 |
| 2027 | 37.7360 | 78.7157 | 357.915 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 91,425.3 | 91,425.3 | 5.44012 | 7.37533 | 7.74924 | 93,766.9 |
| 2028 | 43.8293 | 80.5302 | 400.040 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 101,123 | 101,123 | 3.94555 | 7.86500 | 8.13879 | 103,573 |
| 2029 | 41.6506 | 75.8386 | 372.839 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 99,023.0 | 99,023.0 | 3.67508 | 7.68740 | 7.41466 | 101,413 |
| 2030 | 40.4125 | 71.5923 | 350.606 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 96,942.6 | 96,942.6 | 3.45130 | 7.61396 | 6.70448 | 99,304.6 |
| 2031 | 37.9090 | 59.6984 | 323.116 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 88,682.5 | 88,682.5 | 2.91376 | 6.43619 | 5.79734 | 90,679.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 34.6998 | 61.9544 | 321.282 | 0.12651 | 0.25301 | 46.9365 | 47.1895 | 0.25301 | 11.1904 | 11.4434 | — | 65,018.3 | 65,018.3 | 4.06468 | 4.73102 | 117.184 | 66,646.9 |
| 2024 | 32.0985 | 57.7310 | 298.796 | 0.12720 | 0.25440 | 47.1943 | 47.4487 | 0.25440 | 11.2519 | 11.5063 | — | 64,253.6 | 64,253.6 | 3.92360 | 4.75702 | 111.093 | 65,880.4 |
| 2025 | 30.4797 | 53.6816 | 277.313 | 0.12966 | 0.26172 | 47.1814 | 47.4431 | 0.26172 | 11.2534 | 11.5151 | — | 63,321.9 | 63,321.9 | 3.77688 | 4.68598 | 104.848 | 64,917.6 |
| 2026 | 29.3269 | 56.7956 | 262.206 | 0.15985 | 0.34798 | 48.4422 | 48.7902 | 0.34798 | 11.6030 | 11.9510 | — | 66,803.6 | 66,803.6 | 4.03520 | 5.42633 | 100.546 | 68,622.1 |
| 2027 | 26.8319 | 53.8231 | 244.691 | 0.15985 | 0.34798 | 48.4361 | 48.7840 | 0.34798 | 11.6016 | 11.9495 | — | 65,483.2 | 65,483.2 | 3.74463 | 5.26778 | 92.0077 | 67,238.6 |
| 2028 | 28.8099 | 53.2638 | 254.662 | 0.16029 | 0.34893 | 53.4878 | 53.8367 | 0.34893 | 12.7850 | 13.1339 | — | 69,157.8 | 69,157.8 | 2.37678 | 5.47296 | 91.8233 | 70,940.0 |
| 2029 | 29.6250 | 51.3976 | 255.182 | 0.15985 | 0.34798 | 56.8794 | 57.2274 | 0.31656 | 13.5783 | 13.8948 | — | 70,947.9 | 70,947.9 | 2.45448 | 5.46997 | 88.2607 | 72,727.6 |
| 2030 | 28.3554 | 46.4566 | 237.724 | 0.14873 | 0.31621 | 56.4191 | 56.7353 | 0.29538 | 13.4505 | 13.7459 | — | 67,912.9 | 67,912.9 | 2.05225 | 5.02732 | 78.8356 | 69,541.2 |
| 2031 | 25.8304 | 39.3328 | 213.921 | 0.12685 | 0.25371 | 53.7164 | 53.9701 | 0.12685 | 12.7783 | 12.9052 | — | 61,874.6 | 61,874.6 | 1.86277 | 4.35184 | 66.9283 | 63,284.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.33272 | 11.3067 | 58.6340 | 0.02309 | 0.04618 | 8.56590 | 8.61208 | 0.04618 | 2.04225 | 2.08843 | — | 10,764.5 | 10,764.5 | 0.67295 | 0.78327 | 19.4011 | 11,034.2 |
| 2024 | 5.85798 | 10.5359 | 54.5302 | 0.02321 | 0.04643 | 8.61297 | 8.65940 | 0.04643 | 2.05348 | 2.09990 | — | 10,637.9 | 10,637.9 | 0.64960 | 0.78758 | 18.3927 | 10,907.2 |
| 2025 | 5.56255 | 9.79690 | 50.6097 | 0.02366 | 0.04776 | 8.61061 | 8.65837 | 0.04776 | 2.05374 | 2.10151 | — | 10,483.7 | 10,483.7 | 0.62531 | 0.77582 | 17.3588 | 10,747.8 |
| 2026 | 5.35216 | 10.3652 | 47.8525 | 0.02917 | 0.06351 | 8.84070 | 8.90421 | 0.06351 | 2.11755 | 2.18105 | — | 11,060.1 | 11,060.1 | 0.66807 | 0.89839 | 16.6465 | 11,361.2 |
| 2027 | 4.89682 | 9.82272 | 44.6561 | 0.02917 | 0.06351 | 8.83958 | 8.90309 | 0.06351 | 2.11728 | 2.18079 | — | 10,841.5 | 10,841.5 | 0.61997 | 0.87214 | 15.2329 | 11,132.1 |
| 2028 | 5.25781 | 9.72065 | 46.4759 | 0.02925 | 0.06368 | 9.76152 | 9.82520 | 0.06368 | 2.33326 | 2.39694 | — | 11,449.9 | 11,449.9 | 0.39350 | 0.90611 | 15.2024 | 11,744.9 |
| 2029 | 5.40657 | 9.38006 | 46.5708 | 0.02917 | 0.06351 | 10.3805 | 10.4440 | 0.05777 | 2.47804 | 2.53581 | — | 11,746.2 | 11,746.2 | 0.40637 | 0.90562 | 14.6126 | 12,040.9 |
| 2030 | 5.17485 | 8.47833 | 43.3846 | 0.02714 | 0.05771 | 10.2965 | 10.3542 | 0.05391 | 2.45471 | 2.50862 | — | 11,243.8 | 11,243.8 | 0.33977 | 0.83233 | 13.0521 | 11,513.3 |
| 2031 | 4.71405 | 7.17823 | 39.0405 | 0.02315 | 0.04630 | 9.80325 | 9.84955 | 0.02315 | 2.33204 | 2.35519 | — | 10,244.0 | 10,244.0 | 0.30840 | 0.72050 | 11.0807 | 10,477.5 |

## 2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 54.2650 | 117.608 | 533.324 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 100,716 | 100,716 | 5.54497 | 6.68886 | 381.211 | 103,229 |
| 2024 | 50.0835 | 108.744 | 495.737 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 99,064.2 | 99,064.2 | 5.28738 | 6.68887 | 359.685 | 101,549 |
| 2025 | 47.5663 | 100.901 | 460.546 | 0.23351 | 1.70452 | 67.0613 | 68.7658 | 1.59657 | 16.0021 | 17.5986 | — | 97,307.3 | 97,307.3 | 5.08867 | 6.51127 | 337.650 | 99,712.6 |
| 2026 | 49.7455 | 139.361 | 472.192 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 111,202 | 111,202 | 5.83079 | 7.71288 | 326.058 | 113,972 |
| 2027 | 45.6569 | 132.101 | 444.671 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 109,290 | 109,290 | 5.42452 | 7.29209 | 298.123 | 111,897 |
| 2028 | 449.944 | 110.393 | 469.115 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 115,965 | 115,965 | 5.92229 | 7.68306 | 314.525 | 118,717 |
| 2029 | 447.904 | 103.739 | 442.216 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 113,778 | 113,778 | 3.62894 | 7.50544 | 285.877 | 116,391 |
| 2030 | 445.550 | 98.2855 | 418.532 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 111,618 | 111,618 | 3.16634 | 7.46144 | 258.516 | 114,179 |
| 2031 | 440.754 | 64.4766 | 364.504 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 96,688.1 | 96,688.1 | 2.60094 | 6.23060 | 223.794 | 98,833.7 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 51.6694 | 129.487 | 508.779 | 0.23349 | 2.10815 | 67.0613 | 69.1694 | 1.96791 | 16.0021 | 17.9700 | — | 96,814.0 | 96,814.0 | 6.11161 | 6.88756 | 9.86793 | 99,029.1 |
| 2024 | 49.0228 | 120.247 | 473.231 | 0.23350 | 1.91341 | 67.0613 | 68.9747 | 1.78875 | 16.0021 | 17.7908 | — | 95,253.8 | 95,253.8 | 6.11163 | 6.68887 | 9.32469 | 97,409.2 |
| 2025 | 50.3829 | 151.598 | 473.040 | 0.34063 | 3.07147 | 72.6384 | 75.7099 | 2.86472 | 17.9721 | 20.8369 | — | 107,455 | 107,455 | 6.59658 | 7.69915 | 9.17441 | 109,924 |
| 2026 | 48.8516 | 149.130 | 452.984 | 0.35702 | 3.22971 | 80.3214 | 83.5511 | 3.01031 | 21.9160 | 24.9263 | — | 107,555 | 107,555 | 6.39892 | 7.71508 | 8.44658 | 110,022 |
| 2027 | 44.7630 | 141.659 | 426.414 | 0.35702 | 3.03855 | 80.3214 | 83.3599 | 2.83444 | 21.9160 | 24.7504 | — | 105,718 | 105,718 | 6.01990 | 7.49129 | 7.74924 | 108,109 |
| 2028 | 448.921 | 121.220 | 451.173 | 0.32380 | 2.04341 | 84.6791 | 86.7225 | 1.91891 | 20.7945 | 22.7134 | — | 111,763 | 111,763 | 4.37717 | 7.95132 | 8.13879 | 114,250 |
| 2029 | 446.613 | 114.404 | 423.638 | 0.32378 | 1.93084 | 84.6791 | 86.6100 | 1.77135 | 20.7945 | 22.5658 | — | 109,660 | 109,660 | 4.10657 | 7.77370 | 7.41466 | 112,087 |
| 2030 | 445.243 | 108.713 | 401.343 | 0.32378 | 1.86336 | 84.6791 | 86.5425 | 1.70928 | 20.7945 | 22.5037 | — | 107,580 | 107,580 | 3.88278 | 7.70026 | 6.70448 | 109,978 |
| 2031 | 439.980 | 74.7193 | 346.948 | 0.21667 | 0.81766 | 79.1020 | 79.9197 | 0.60307 | 18.8244 | 19.4275 | — | 92,723.5 | 92,723.5 | 3.07768 | 6.46898 | 5.79734 | 94,734.0 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 37.6218 | 89.8471 | 347.396 | 0.16632 | 1.50170 | 46.9365 | 48.4381 | 1.40180 | 11.1904 | 12.5922 | — | 69,165.8 | 69,165.8 | 4.23292 | 4.76467 | 117.184 | 70,808.7 |
| 2024 | 34.8336 | 83.5950 | 323.762 | 0.16724 | 1.37047 | 47.1943 | 48.5648 | 1.28118 | 11.2519 | 12.5331 | — | 68,424.2 | 68,424.2 | 4.09277 | 4.79085 | 111.093 | 70,065.3 |
| 2025 | 33.1914 | 78.7959 | 302.576 | 0.17329 | 1.30044 | 47.4021 | 48.7025 | 1.21734 | 11.3403 | 12.5576 | — | 67,881.3 | 67,881.3 | 3.96183 | 4.72297 | 104.848 | 69,492.6 |
| 2026 | 34.4682 | 103.679 | 311.239 | 0.25418 | 2.28661 | 56.1262 | 58.4128 | 2.13152 | 15.2398 | 17.3713 | — | 76,918.2 | 76,918.2 | 4.44550 | 5.50839 | 100.546 | 78,771.4 |
| 2027 | 31.6661 | 97.0858 | 291.903 | 0.25205 | 2.09931 | 56.0451 | 58.1444 | 1.95920 | 15.1998 | 17.1590 | — | 75,371.1 | 75,371.1 | 4.14573 | 5.34800 | 92.0077 | 77,160.5 |
| 2028 | 199.608 | 80.1957 | 288.005 | 0.22726 | 1.38300 | 56.0931 | 57.4761 | 1.30027 | 13.8108 | 15.1111 | — | 76,289.7 | 76,289.7 | 2.66608 | 5.53082 | 91.8233 | 78,096.3 |
| 2029 | 318.884 | 78.9440 | 291.468 | 0.23127 | 1.37917 | 59.4776 | 60.8568 | 1.26525 | 14.6013 | 15.8666 | — | 78,545.8 | 78,545.8 | 2.76268 | 5.53161 | 88.2607 | 80,351.6 |
| 2030 | 316.866 | 67.7569 | 267.502 | 0.20549 | 1.08624 | 58.1417 | 59.2280 | 1.00381 | 14.1288 | 15.1326 | — | 73,923.0 | 73,923.0 | 2.29605 | 5.07608 | 78.8356 | 75,571.9 |
| 2031 | 252.576 | 49.0219 | 229.288 | 0.15240 | 0.55101 | 53.7164 | 54.2674 | 0.40037 | 12.7783 | 13.1787 | — | 64,513.2 | 64,513.2 | 1.96980 | 4.37325 | 66.9283 | 65,932.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.86598 | 16.3971 | 63.3997 | 0.03035 | 0.27406 | 8.56590 | 8.83996 | 0.25583 | 2.04225 | 2.29808 | — | 11,451.2 | 11,451.2 | 0.70081 | 0.78885 | 19.4011 | 11,723.2 |
| 2024 | 6.35713 | 15.2561 | 59.0865 | 0.03052 | 0.25011 | 8.61297 | 8.86308 | 0.23382 | 2.05348 | 2.28729 | — | 11,328.4 | 11,328.4 | 0.67761 | 0.79318 | 18.3927 | 11,600.1 |
| 2025 | 6.05743 | 14.3803 | 55.2201 | 0.03163 | 0.23733 | 8.65088 | 8.88821 | 0.22216 | 2.06960 | 2.29176 | — | 11,238.5 | 11,238.5 | 0.65593 | 0.78194 | 17.3588 | 11,505.3 |
| 2026 | 6.29044 | 18.9214 | 56.8012 | 0.04639 | 0.41731 | 10.2430 | 10.6603 | 0.38900 | 2.78126 | 3.17027 | — | 12,734.7 | 12,734.7 | 0.73600 | 0.91198 | 16.6465 | 13,041.5 |
| 2027 | 5.77906 | 17.7182 | 53.2723 | 0.04600 | 0.38312 | 10.2282 | 10.6113 | 0.35755 | 2.77397 | 3.13152 | — | 12,478.5 | 12,478.5 | 0.68637 | 0.88542 | 15.2329 | 12,774.8 |
| 2028 | 36.4285 | 14.6357 | 52.5609 | 0.04147 | 0.25240 | 10.2370 | 10.4894 | 0.23730 | 2.52047 | 2.75777 | — | 12,630.6 | 12,630.6 | 0.44140 | 0.91569 | 15.2024 | 12,929.7 |
| 2029 | 58.1963 | 14.4073 | 53.1929 | 0.04221 | 0.25170 | 10.8547 | 11.1064 | 0.23091 | 2.66474 | 2.89565 | — | 13,004.2 | 13,004.2 | 0.45739 | 0.91582 | 14.6126 | 13,303.1 |
| 2030 | 57.8280 | 12.3656 | 48.8191 | 0.03750 | 0.19824 | 10.6109 | 10.8091 | 0.18319 | 2.57850 | 2.76169 | — | 12,238.8 | 12,238.8 | 0.38014 | 0.84040 | 13.0521 | 12,511.8 |
| 2031 | 46.0952 | 8.94649 | 41.8451 | 0.02781 | 0.10056 | 9.80325 | 9.90381 | 0.07307 | 2.33204 | 2.40511 | — | 10,680.9 | 10,680.9 | 0.32612 | 0.72404 | 11.0807 | 10,915.9 |

### 2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 3.52486 | 32.6394 | 32.9632 | 0.05591 | 1.34932 | 0.00000 | 1.34932 | 1.24138 | 0.00000 | 1.24138 | — | 5,822.67 | 5,822.67 | 0.23619 | 0.04724 | 0.00000 | 5,842.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 3.81863 | 36.1107 | 34.8566 | 0.05591 | 1.55822 | 0.00000 | 1.55822 | 1.43356 | 0.00000 | 1.43356 | — | 5,822.87 | 5,822.87 | 0.23620 | 0.04724 | 0.00000 | 5,842.85 |
| 2025 | 6.72163 | 62.3177 | 61.2732 | 0.11684 | 2.58430 | 3.63748 | 6.22178 | 2.37755 | 1.43225 | 3.80980 | — | 12,421.5 | 12,421.5 | 0.50387 | 0.10077 | 0.00000 | 12,464.2 |
| 2026 | 7.25888 | 66.2428 | 69.3452 | 0.13323 | 2.74254 | 11.3037 | 14.0463 | 2.52314 | 5.37220 | 7.89534 | — | 14,293.8 | 14,293.8 | 0.57982 | 0.11596 | 0.00000 | 14,342.8 |
| 2027 | 7.02704 | 62.9435 | 68.4990 | 0.13323 | 2.55137 | 11.3037 | 13.8551 | 2.34726 | 5.37220 | 7.71946 | — | 14,293.0 | 14,293.0 | 0.57979 | 0.11596 | 0.00000 | 14,342.0 |
| 2028 | 405.092 | 40.6896 | 51.1323 | 0.10001 | 1.55624 | 3.63748 | 5.19372 | 1.43174 | 1.43225 | 2.86398 | — | 10,640.3 | 10,640.3 | 0.43162 | 0.08632 | 0.00000 | 10,676.8 |
| 2029 | 404.962 | 38.5650 | 50.7997 | 0.09999 | 1.44367 | 3.63748 | 5.08115 | 1.32817 | 1.43225 | 2.76042 | — | 10,637.1 | 10,637.1 | 0.43149 | 0.08630 | 0.00000 | 10,673.6 |
| 2030 | 404.830 | 37.1210 | 50.7376 | 0.09999 | 1.37619 | 3.63748 | 5.01367 | 1.26610 | 1.43225 | 2.69834 | — | 10,637.0 | 10,637.0 | 0.43148 | 0.08630 | 0.00000 | 10,673.5 |
| 2031 | 402.071 | 15.0209 | 23.8322 | 0.03907 | 0.46247 | 0.00000 | 0.46247 | 0.42547 | 0.00000 | 0.42547 | — | 4,040.98 | 4,040.98 | 0.16392 | 0.03278 | 0.00000 | 4,054.85 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 2.73507 | 25.8641 | 24.9658 | 0.04004 | 1.11606 | 0.00000 | 1.11606 | 1.02678 | 0.00000 | 1.02678 | — | 4,170.59 | 4,170.59 | 0.16918 | 0.03384 | 0.00000 | 4,184.90 |
| 2025 | 2.71169 | 25.1143 | 25.2626 | 0.04363 | 1.03872 | 0.22067 | 1.25939 | 0.95562 | 0.08689 | 1.04251 | — | 4,559.37 | 4,559.37 | 0.18495 | 0.03699 | 0.00000 | 4,575.02 |
| 2026 | 5.14130 | 46.8832 | 49.0335 | 0.09433 | 1.93864 | 7.68402 | 9.62265 | 1.78354 | 3.63682 | 5.42036 | — | 10,114.6 | 10,114.6 | 0.41029 | 0.08206 | 0.00000 | 10,149.3 |
| 2027 | 4.83418 | 43.2627 | 47.2122 | 0.09220 | 1.75133 | 7.60901 | 9.36033 | 1.61122 | 3.59827 | 5.20949 | — | 9,887.87 | 9,887.87 | 0.40110 | 0.08022 | 0.00000 | 9,921.81 |
| 2028 | 170.798 | 26.9318 | 33.3427 | 0.06697 | 1.03406 | 2.60532 | 3.63938 | 0.95134 | 1.02584 | 1.97717 | — | 7,131.83 | 7,131.83 | 0.28930 | 0.05786 | 0.00000 | 7,156.31 |
| 2029 | 289.259 | 27.5464 | 36.2855 | 0.07142 | 1.03119 | 2.59820 | 3.62939 | 0.94869 | 1.02303 | 1.97173 | — | 7,597.93 | 7,597.93 | 0.30821 | 0.06164 | 0.00000 | 7,624.00 |
| 2030 | 288.510 | 21.3003 | 29.7782 | 0.05676 | 0.77003 | 1.72264 | 2.49267 | 0.70843 | 0.67828 | 1.38671 | — | 6,010.16 | 6,010.16 | 0.24380 | 0.04876 | 0.00000 | 6,030.78 |
| 2031 | 226.746 | 9.68912 | 15.3674 | 0.02555 | 0.29730 | 0.00000 | 0.29730 | 0.27351 | 0.00000 | 0.27351 | — | 2,638.66 | 2,638.66 | 0.10704 | 0.02141 | 0.00000 | 2,647.72 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.49915 | 4.72019 | 4.55625 | 0.00731 | 0.20368 | 0.00000 | 0.20368 | 0.18739 | 0.00000 | 0.18739 | — | 690.488 | 690.488 | 0.02801 | 0.00560 | 0.00000 | 692.858 |
| 2025 | 0.49488 | 4.58336 | 4.61042 | 0.00796 | 0.18957 | 0.04027 | 0.22984 | 0.17440 | 0.01586 | 0.19026 | — | 754.856 | 754.856 | 0.03062 | 0.00612 | 0.00000 | 757.447 |
| 2026 | 0.93829 | 8.55618 | 8.94862 | 0.01722 | 0.35380 | 1.40233 | 1.75613 | 0.32550 | 0.66372 | 0.98922 | — | 1,674.59 | 1,674.59 | 0.06793 | 0.01359 | 0.00000 | 1,680.34 |
| 2027 | 0.88224 | 7.89543 | 8.61624 | 0.01683 | 0.31962 | 1.38864 | 1.70826 | 0.29405 | 0.65668 | 0.95073 | — | 1,637.05 | 1,637.05 | 0.06641 | 0.01328 | 0.00000 | 1,642.67 |
| 2028 | 31.1706 | 4.91506 | 6.08505 | 0.01222 | 0.18872 | 0.47547 | 0.66419 | 0.17362 | 0.18721 | 0.36083 | — | 1,180.76 | 1,180.76 | 0.04790 | 0.00958 | 0.00000 | 1,184.81 |
| 2029 | 52.7897 | 5.02722 | 6.62211 | 0.01303 | 0.18819 | 0.47417 | 0.66236 | 0.17314 | 0.18670 | 0.35984 | — | 1,257.92 | 1,257.92 | 0.05103 | 0.01021 | 0.00000 | 1,262.24 |
| 2030 | 52.6532 | 3.88731 | 5.43453 | 0.01036 | 0.14053 | 0.31438 | 0.45491 | 0.12929 | 0.12379 | 0.25307 | — | 995.050 | 995.050 | 0.04036 | 0.00807 | 0.00000 | 998.465 |
| 2031 | 41.3811 | 1.76826 | 2.80456 | 0.00466 | 0.05426 | 0.00000 | 0.05426 | 0.04992 | 0.00000 | 0.04992 | — | 436.861 | 436.861 | 0.01772 | 0.00354 | 0.00000 | 438.360 |

### 2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 50.1630 | 78.4514 | 496.664 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 94,893.4 | 94,893.4 | 5.30878 | 6.64163 | 381.211 | 97,386.6 |
| 2024 | 46.2649 | 72.6334 | 460.880 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 93,241.3 | 93,241.3 | 5.05118 | 6.64163 | 359.685 | 95,706.5 |
| 2025 | 44.0414 | 68.2618 | 427.583 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 91,484.7 | 91,484.7 | 4.85248 | 6.46403 | 337.650 | 93,869.9 |
| 2026 | 42.4866 | 73.1182 | 402.847 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 96,908.0 | 96,908.0 | 5.25097 | 7.59692 | 326.058 | 99,629.2 |
| 2027 | 38.6299 | 69.1580 | 376.172 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 94,997.0 | 94,997.0 | 4.84473 | 7.17614 | 298.123 | 97,554.7 |
| 2028 | 44.8523 | 69.7032 | 417.983 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 105,325 | 105,325 | 5.49067 | 7.59673 | 314.525 | 108,040 |
| 2029 | 42.9418 | 65.1742 | 391.417 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 103,141 | 103,141 | 3.19746 | 7.41914 | 285.877 | 105,718 |
| 2030 | 40.7190 | 61.1645 | 367.795 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 100,981 | 100,981 | 2.73485 | 7.37515 | 258.516 | 103,506 |
| 2031 | 38.6831 | 49.4558 | 340.672 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 92,647.2 | 92,647.2 | 2.43702 | 6.19782 | 223.794 | 94,778.8 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 47.5674 | 90.3301 | 472.119 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 90,991.4 | 90,991.4 | 5.87543 | 6.84033 | 9.86793 | 93,186.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 45.2042 | 84.1358 | 438.375 | 0.17760 | 0.35519 | 67.0613 | 67.4165 | 0.35519 | 16.0021 | 16.3573 | — | 89,430.9 | 89,430.9 | 5.87543 | 6.64163 | 9.32469 | 91,566.3 |
| 2025 | 43.6613 | 89.2799 | 411.766 | 0.22379 | 0.48717 | 69.0009 | 69.4881 | 0.48717 | 16.5399 | 17.0271 | — | 95,033.7 | 95,033.7 | 6.09271 | 7.59838 | 9.17441 | 97,459.5 |
| 2026 | 41.5927 | 82.8875 | 383.639 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 93,261.1 | 93,261.1 | 5.81911 | 7.59912 | 8.44658 | 95,679.6 |
| 2027 | 37.7360 | 78.7157 | 357.915 | 0.22379 | 0.48717 | 69.0176 | 69.5048 | 0.48717 | 16.5438 | 17.0310 | — | 91,425.3 | 91,425.3 | 5.44012 | 7.37533 | 7.74924 | 93,766.9 |
| 2028 | 43.8293 | 80.5302 | 400.040 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.48717 | 19.3622 | 19.8494 | — | 101,123 | 101,123 | 3.94555 | 7.86500 | 8.13879 | 103,573 |
| 2029 | 41.6506 | 75.8386 | 372.839 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 99,023.0 | 99,023.0 | 3.67508 | 7.68740 | 7.41466 | 101,413 |
| 2030 | 40.4125 | 71.5923 | 350.606 | 0.22379 | 0.48717 | 81.0417 | 81.5288 | 0.44318 | 19.3622 | 19.8054 | — | 96,942.6 | 96,942.6 | 3.45130 | 7.61396 | 6.70448 | 99,304.6 |
| 2031 | 37.9090 | 59.6984 | 323.116 | 0.17760 | 0.35519 | 79.1020 | 79.4572 | 0.17760 | 18.8244 | 19.0020 | — | 88,682.5 | 88,682.5 | 2.91376 | 6.43619 | 5.79734 | 90,679.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 34.6998 | 61.9544 | 321.282 | 0.12651 | 0.25301 | 46.9365 | 47.1895 | 0.25301 | 11.1904 | 11.4434 | — | 65,018.3 | 65,018.3 | 4.06468 | 4.73102 | 117.184 | 66,646.9 |
| 2024 | 32.0985 | 57.7310 | 298.796 | 0.12720 | 0.25440 | 47.1943 | 47.4487 | 0.25440 | 11.2519 | 11.5063 | — | 64,253.6 | 64,253.6 | 3.92360 | 4.75702 | 111.093 | 65,880.4 |
| 2025 | 30.4797 | 53.6816 | 277.313 | 0.12966 | 0.26172 | 47.1814 | 47.4431 | 0.26172 | 11.2534 | 11.5151 | — | 63,321.9 | 63,321.9 | 3.77688 | 4.68598 | 104.848 | 64,917.6 |
| 2026 | 29.3269 | 56.7956 | 262.206 | 0.15985 | 0.34798 | 48.4422 | 48.7902 | 0.34798 | 11.6030 | 11.9510 | — | 66,803.6 | 66,803.6 | 4.03520 | 5.42633 | 100.546 | 68,622.1 |
| 2027 | 26.8319 | 53.8231 | 244.691 | 0.15985 | 0.34798 | 48.4361 | 48.7840 | 0.34798 | 11.6016 | 11.9495 | — | 65,483.2 | 65,483.2 | 3.74463 | 5.26778 | 92.0077 | 67,238.6 |
| 2028 | 28.8099 | 53.2638 | 254.662 | 0.16029 | 0.34893 | 53.4878 | 53.8367 | 0.34893 | 12.7850 | 13.1339 | — | 69,157.8 | 69,157.8 | 2.37678 | 5.47296 | 91.8233 | 70,940.0 |
| 2029 | 29.6250 | 51.3976 | 255.182 | 0.15985 | 0.34798 | 56.8794 | 57.2274 | 0.31656 | 13.5783 | 13.8948 | — | 70,947.9 | 70,947.9 | 2.45448 | 5.46997 | 88.2607 | 72,727.6 |
| 2030 | 28.3554 | 46.4566 | 237.724 | 0.14873 | 0.31621 | 56.4191 | 56.7353 | 0.29538 | 13.4505 | 13.7459 | — | 67,912.9 | 67,912.9 | 2.05225 | 5.02732 | 78.8356 | 69,541.2 |
| 2031 | 25.8304 | 39.3328 | 213.921 | 0.12685 | 0.25371 | 53.7164 | 53.9701 | 0.12685 | 12.7783 | 12.9052 | — | 61,874.6 | 61,874.6 | 1.86277 | 4.35184 | 66.9283 | 63,284.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 6.33272 | 11.3067 | 58.6340 | 0.02309 | 0.04618 | 8.56590 | 8.61208 | 0.04618 | 2.04225 | 2.08843 | — | 10,764.5 | 10,764.5 | 0.67295 | 0.78327 | 19.4011 | 11,034.2 |
| 2024 | 5.85798 | 10.5359 | 54.5302 | 0.02321 | 0.04643 | 8.61297 | 8.65940 | 0.04643 | 2.05348 | 2.09990 | — | 10,637.9 | 10,637.9 | 0.64960 | 0.78758 | 18.3927 | 10,907.2 |
| 2025 | 5.56255 | 9.79690 | 50.6097 | 0.02366 | 0.04776 | 8.61061 | 8.65837 | 0.04776 | 2.05374 | 2.10151 | — | 10,483.7 | 10,483.7 | 0.62531 | 0.77582 | 17.3588 | 10,747.8 |
| 2026 | 5.35216 | 10.3652 | 47.8525 | 0.02917 | 0.06351 | 8.84070 | 8.90421 | 0.06351 | 2.11755 | 2.18105 | — | 11,060.1 | 11,060.1 | 0.66807 | 0.89839 | 16.6465 | 11,361.2 |
| 2027 | 4.89682 | 9.82272 | 44.6561 | 0.02917 | 0.06351 | 8.83958 | 8.90309 | 0.06351 | 2.11728 | 2.18079 | — | 10,841.5 | 10,841.5 | 0.61997 | 0.87214 | 15.2329 | 11,132.1 |
| 2028 | 5.25781 | 9.72065 | 46.4759 | 0.02925 | 0.06368 | 9.76152 | 9.82520 | 0.06368 | 2.33326 | 2.39694 | — | 11,449.9 | 11,449.9 | 0.39350 | 0.90611 | 15.2024 | 11,744.9 |
| 2029 | 5.40657 | 9.38006 | 46.5708 | 0.02917 | 0.06351 | 10.3805 | 10.4440 | 0.05777 | 2.47804 | 2.53581 | — | 11,746.2 | 11,746.2 | 0.40637 | 0.90562 | 14.6126 | 12,040.9 |
| 2030 | 5.17485 | 8.47833 | 43.3846 | 0.02714 | 0.05771 | 10.2965 | 10.3542 | 0.05391 | 2.45471 | 2.50862 | — | 11,243.8 | 11,243.8 | 0.33977 | 0.83233 | 13.0521 | 11,513.3 |
| 2031 | 4.71405 | 7.17823 | 39.0405 | 0.02315 | 0.04630 | 9.80325 | 9.84955 | 0.02315 | 2.33204 | 2.35519 | — | 10,244.0 | 10,244.0 | 0.30840 | 0.72050 | 11.0807 | 10,477.5 |

## 2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 383.019 | 133.869 | 761.497 | 0.84100 | 10.6197 | 0.00000 | 10.6197 | 10.5328 | 0.00000 | 10.5328 | 5,981.49 | 212,926 | 218,908 | 619.020 | 3.27426 | 94.8738 | 235,454 |
| Mit. | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | 0.00000 | 0.35648 | 0.26963 | 0.00000 | 0.26963 | 5,981.49 | 51,808.9 | 57,790.4 | 604.761 | 2.97097 | 94.8738 | 73,889.6 |
| % Reduced | 2% | 95% | 7% | 96% | 97% | — | 97% | 97% | — | 97% | — | 76% | 74% | 2% | 9% | — | 69% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 319.304 | 126.939 | 54.0167 | 0.81025 | 10.2632 | 0.00000 | 10.2632 | 10.2632 | 0.00000 | 10.2632 | 5,981.49 | 211,030 | 217,012 | 618.940 | 3.25853 | 94.8738 | 233,551 |
| Mit. | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 5,981.49 | 49,913.3 | 55,894.8 | 604.682 | 2.95524 | 94.8738 | 71,987.3 |
| % Reduced | 2% | 100% | 100% | 100% | 100% | — | 100% | 100% | — | 100% | — | 76% | 74% | 2% | 9% | — | 69% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 362.944 | 131.686 | 538.592 | 0.83131 | 10.5073 | 0.00000 | 10.5073 | 10.4479 | 0.00000 | 10.4479 | 5,981.49 | 212,329 | 218,310 | 618.995 | 3.26931 | 94.8738 | 234,854 |
| Mit. | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | 0.00000 | 0.24416 | 0.18468 | 0.00000 | 0.18468 | 5,981.49 | 51,211.7 | 57,193.1 | 604.736 | 2.96602 | 94.8738 | 73,290.3 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 66.2374 | 24.0327 | 98.2931 | 0.15171 | 1.91759 | 0.00000 | 1.91759 | 1.90673 | 0.00000 | 1.90673 | 990.304 | 35,153.5 | 36,143.8 | 102.482 | 0.54127 | 15.7074 | 38,882.8 |
| Mit. | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | 0.00000 | 0.04456 | 0.03370 | 0.00000 | 0.03370 | 990.304 | 8,478.67 | 9,468.98 | 100.121 | 0.49106 | 15.7074 | 12,134.0 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |

## 2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 383.019 | 133.869 | 761.497 | 0.84100 | 10.6197 | 0.00000 | 10.6197 | 10.5328 | 0.00000 | 10.5328 | 5,981.49 | 212,926 | 218,908 | 619.020 | 3.27426 | 94.8738 | 235,454 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 319.304 | 126.939 | 54.0167 | 0.81025 | 10.2632 | 0.00000 | 10.2632 | 10.2632 | 0.00000 | 10.2632 | 5,981.49 | 211,030 | 217,012 | 618.940 | 3.25853 | 94.8738 | 233,551 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | — | 0.24416 | 0.18468 | — | 0.18468 | 0.00000 | 1,298.38 | 1,298.38 | 0.05427 | 0.01077 | — | 1,302.95 |
| Energy | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 208,035 | 208,035 | 18.2613 | 0.78844 | — | 208,726 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 362.944 | 131.686 | 538.592 | 0.83131 | 10.5073 | 0.00000 | 10.5073 | 10.4479 | 0.00000 | 10.4479 | 5,981.49 | 212,329 | 218,310 | 618.995 | 3.26931 | 94.8738 | 234,854 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Energy | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 34,442.5 | 34,442.5 | 3.02337 | 0.13054 | — | 34,557.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Waste | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | 66.2374 | 24.0327 | 98.2931 | 0.15171 | 1.91759 | 0.00000 | 1.91759 | 1.90673 | 0.00000 | 1.90673 | 990.304 | 35,153.5 | 36,143.8 | 102.482 | 0.54127 | 15.7074 | 38,882.8 |

## 2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | 0.00000 | 0.35648 | 0.26963 | 0.00000 | 0.26963 | 5,981.49 | 51,808.9 | 57,790.4 | 604.761 | 2.97097 | 94.8738 | 73,889.6 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 5,981.49 | 49,913.3 | 55,894.8 | 604.682 | 2.95524 | 94.8738 | 71,987.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | — | 0.24416 | 0.18468 | — | 0.18468 | 0.00000 | 1,298.38 | 1,298.38 | 0.05427 | 0.01077 | — | 1,302.95 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Waste | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | 355.517 | 4.74660 | 484.576 | 0.02106 | 0.24416 | 0.00000 | 0.24416 | 0.18468 | 0.00000 | 0.18468 | 5,981.49 | 51,211.7 | 57,193.1 | 604.736 | 2.96602 | 94.8738 | 73,290.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |
| Water | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Waste | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | 0.00000 | 0.04456 | 0.03370 | 0.00000 | 0.03370 | 990.304 | 8,478.67 | 9,468.98 | 100.121 | 0.49106 | 15.7074 | 12,134.0 |

# 3. Construction Emissions Details

## 3.1. Demolition (2023)

### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.2. Demolition (2024)

### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.87375 | 17.8279 | 15.5720 | 0.02328 | 0.75954 | — | 0.75954 | 0.69878 | — | 0.69878 | — | 2,453.30 | 2,453.30 | 0.09952 | 0.01990 | — | 2,461.72 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34196 | 3.25359 | 2.84190 | 0.00425 | 0.13862 | — | 0.13862 | 0.12753 | — | 0.12753 | — | 406.172 | 406.172 | 0.01648 | 0.00330 | — | 407.566 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07454 | 0.05361 | 0.73313 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 110.578 | 110.578 | 0.00644 | 0.00445 | 0.48365 | 112.550 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05173 | 0.04631 | 0.47279 | 0.00000 | 0.00000 | 0.07061 | 0.07061 | 0.00000 | 0.01653 | 0.01653 | — | 74.9796 | 74.9796 | 0.00509 | 0.00319 | 0.14947 | 76.2069 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00944 | 0.00845 | 0.08628 | 0.00000 | 0.00000 | 0.01289 | 0.01289 | 0.00000 | 0.00302 | 0.00302 | — | 12.4137 | 12.4137 | 0.00084 | 0.00053 | 0.02475 | 12.6169 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.87375 | 17.8279 | 15.5720 | 0.02328 | 0.75954 | — | 0.75954 | 0.69878 | — | 0.69878 | — | 2,453.30 | 2,453.30 | 0.09952 | 0.01990 | — | 2,461.72 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34196 | 3.25359 | 2.84190 | 0.00425 | 0.13862 | — | 0.13862 | 0.12753 | — | 0.12753 | — | 406.172 | 406.172 | 0.01648 | 0.00330 | — | 407.566 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07454 | 0.05361 | 0.73313 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 110.578 | 110.578 | 0.00644 | 0.00445 | 0.48365 | 112.550 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05173 | 0.04631 | 0.47279 | 0.00000 | 0.00000 | 0.07061 | 0.07061 | 0.00000 | 0.01653 | 0.01653 | — | 74.9796 | 74.9796 | 0.00509 | 0.00319 | 0.14947 | 76.2069 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00944 | 0.00845 | 0.08628 | 0.00000 | 0.00000 | 0.01289 | 0.01289 | 0.00000 | 0.00302 | 0.00302 | — | 12.4137 | 12.4137 | 0.00084 | 0.00053 | 0.02475 | 12.6169 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.3. Demolition (2025)

### 3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.71283 | 15.8537 | 14.2308 | 0.02322 | 0.65534 | — | 0.65534 | 0.60292 | — | 0.60292 | — | 2,446.42 | 2,446.42 | 0.09924 | 0.01985 | — | 2,454.82 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.31259 | 2.89330 | 2.59712 | 0.00424 | 0.11960 | — | 0.11960 | 0.11003 | — | 0.11003 | — | 405.033 | 405.033 | 0.01643 | 0.00329 | — | 406.423 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07123 | 0.04948 | 0.68003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 108.441 | 108.441 | 0.00611 | 0.00445 | 0.44783 | 110.369 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07024 | 0.06499 | 0.64566 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.205 | 102.205 | 0.00743 | 0.00445 | 0.01164 | 103.729 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04923 | 0.04100 | 0.43815 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 73.3433 | 73.3433 | 0.00484 | 0.00318 | 0.13851 | 74.5508 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00898 | 0.00748 | 0.07996 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 12.1428 | 12.1428 | 0.00080 | 0.00053 | 0.02293 | 12.3427 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.39796 | 22.1952 | 19.9231 | 0.03251 | 0.91748 | — | 0.91748 | 0.84408 | — | 0.84408 | — | 3,424.99 | 3,424.99 | 0.13893 | 0.02779 | — | 3,436.75 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.71283 | 15.8537 | 14.2308 | 0.02322 | 0.65534 | — | 0.65534 | 0.60292 | — | 0.60292 | — | 2,446.42 | 2,446.42 | 0.09924 | 0.01985 | — | 2,454.82 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.31259 | 2.89330 | 2.59712 | 0.00424 | 0.11960 | — | 0.11960 | 0.11003 | — | 0.11003 | — | 405.033 | 405.033 | 0.01643 | 0.00329 | — | 406.423 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07123 | 0.04948 | 0.68003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 108.441 | 108.441 | 0.00611 | 0.00445 | 0.44783 | 110.369 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07024 | 0.06499 | 0.64566 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.205 | 102.205 | 0.00743 | 0.00445 | 0.01164 | 103.729 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04923 | 0.04100 | 0.43815 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 73.3433 | 73.3433 | 0.00484 | 0.00318 | 0.13851 | 74.5508 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00898 | 0.00748 | 0.07996 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 12.1428 | 12.1428 | 0.00080 | 0.00053 | 0.02293 | 12.3427 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.4. Demolition (2026)

### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28674 | 20.6515 | 19.0056 | 0.03253 | 0.84309 | — | 0.84309 | 0.77564 | — | 0.77564 | — | 3,426.59 | 3,426.59 | 0.13900 | 0.02780 | — | 3,438.35 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11635 | 1.05076 | 0.96702 | 0.00165 | 0.04290 | — | 0.04290 | 0.03947 | — | 0.03947 | — | 174.347 | 174.347 | 0.00707 | 0.00141 | — | 174.946 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02123 | 0.19176 | 0.17648 | 0.00030 | 0.00783 | — | 0.00783 | 0.00720 | — | 0.00720 | — | 28.8652 | 28.8652 | 0.00117 | 0.00023 | — | 28.9642 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06694 | 0.05773 | 0.60112 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.283 | 100.283 | 0.00710 | 0.00445 | 0.01075 | 101.799 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00336 | 0.00273 | 0.02920 | 0.00000 | 0.00000 | 0.00502 | 0.00502 | 0.00000 | 0.00117 | 0.00117 | — | 5.12627 | 5.12627 | 0.00034 | 0.00023 | 0.00911 | 5.21154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00061 | 0.00050 | 0.00533 | 0.00000 | 0.00000 | 0.00092 | 0.00092 | 0.00000 | 0.00021 | 0.00021 | — | 0.84871 | 0.84871 | 0.00006 | 0.00004 | 0.00151 | 0.86283 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28674 | 20.6515 | 19.0056 | 0.03253 | 0.84309 | — | 0.84309 | 0.77564 | — | 0.77564 | — | 3,426.59 | 3,426.59 | 0.13900 | 0.02780 | — | 3,438.35 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11635 | 1.05076 | 0.96702 | 0.00165 | 0.04290 | — | 0.04290 | 0.03947 | — | 0.03947 | — | 174.347 | 174.347 | 0.00707 | 0.00141 | — | 174.946 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02123 | 0.19176 | 0.17648 | 0.00030 | 0.00783 | — | 0.00783 | 0.00720 | — | 0.00720 | — | 28.8652 | 28.8652 | 0.00117 | 0.00023 | — | 28.9642 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06694 | 0.05773 | 0.60112 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.283 | 100.283 | 0.00710 | 0.00445 | 0.01075 | 101.799 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00336 | 0.00273 | 0.02920 | 0.00000 | 0.00000 | 0.00502 | 0.00502 | 0.00000 | 0.00117 | 0.00117 | — | 5.12627 | 5.12627 | 0.00034 | 0.00023 | 0.00911 | 5.21154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00061 | 0.00050 | 0.00533 | 0.00000 | 0.00000 | 0.00092 | 0.00092 | 0.00000 | 0.00021 | 0.00021 | — | 0.84871 | 0.84871 | 0.00006 | 0.00004 | 0.00151 | 0.86283 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.5. Site Preparation (2026)

### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.08566 | 19.3472 | 19.1115 | 0.03244 | 0.82429 | — | 0.82429 | 0.75835 | — | 0.75835 | — | 3,514.68 | 3,514.68 | 0.14257 | 0.02851 | — | 3,526.74 |
| Dust From Material Movement | — | — | — | — | — | 5.08582 | 5.08582 | — | 2.61379 | 2.61379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38063 | 3.53087 | 3.48785 | 0.00592 | 0.15043 | — | 0.15043 | 0.13840 | — | 0.13840 | — | 581.895 | 581.895 | 0.02360 | 0.00472 | — | 583.892 |
| Dust From Material Movement | — | — | — | — | — | 0.92816 | 0.92816 | — | 0.47702 | 0.47702 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07963 | 0.05331 | 0.73949 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 124.116 | 124.116 | 0.00713 | 0.00520 | 0.48433 | 126.327 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07809 | 0.06735 | 0.70130 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 116.997 | 116.997 | 0.00828 | 0.00520 | 0.01254 | 118.765 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05104 | 0.04149 | 0.44425 | 0.00000 | 0.00000 | 0.07630 | 0.07630 | 0.00000 | 0.01786 | 0.01786 | — | 77.9785 | 77.9785 | 0.00524 | 0.00345 | 0.13864 | 79.2755 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00931 | 0.00757 | 0.08107 | 0.00000 | 0.00000 | 0.01393 | 0.01393 | 0.00000 | 0.00326 | 0.00326 | — | 12.9102 | 12.9102 | 0.00087 | 0.00057 | 0.02295 | 13.1250 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14387 | 29.1635 | 28.8082 | 0.04890 | 1.24251 | — | 1.24251 | 1.14311 | — | 1.14311 | — | 5,297.94 | 5,297.94 | 0.21491 | 0.04298 | — | 5,316.12 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.08566 | 19.3472 | 19.1115 | 0.03244 | 0.82429 | — | 0.82429 | 0.75835 | — | 0.75835 | — | 3,514.68 | 3,514.68 | 0.14257 | 0.02851 | — | 3,526.74 |
| Dust From Material Movement | — | — | — | — | — | 5.08582 | 5.08582 | — | 2.61379 | 2.61379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38063 | 3.53087 | 3.48785 | 0.00592 | 0.15043 | — | 0.15043 | 0.13840 | — | 0.13840 | — | 581.895 | 581.895 | 0.02360 | 0.00472 | — | 583.892 |
| Dust From Material Movement | — | — | — | — | — | 0.92816 | 0.92816 | — | 0.47702 | 0.47702 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07963 | 0.05331 | 0.73949 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 124.116 | 124.116 | 0.00713 | 0.00520 | 0.48433 | 126.327 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.07809 | 0.06735 | 0.70130 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 116.997 | 116.997 | 0.00828 | 0.00520 | 0.01254 | 118.765 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05104 | 0.04149 | 0.44425 | 0.00000 | 0.00000 | 0.07630 | 0.07630 | 0.00000 | 0.01786 | 0.01786 | — | 77.9785 | 77.9785 | 0.00524 | 0.00345 | 0.13864 | 79.2755 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00931 | 0.00757 | 0.08107 | 0.00000 | 0.00000 | 0.01393 | 0.01393 | 0.00000 | 0.00326 | 0.00326 | — | 12.9102 | 12.9102 | 0.00087 | 0.00057 | 0.02295 | 13.1250 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.6. Site Preparation (2027)

### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99465 | 18.2833 | 18.4840 | 0.03197 | 0.76587 | — | 0.76587 | 0.70460 | — | 0.70460 | — | 3,462.76 | 3,462.76 | 0.14046 | 0.02809 | — | 3,474.65 |
| Dust From Material Movement | — | — | — | — | — | 5.01081 | 5.01081 | — | 2.57523 | 2.57523 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36402 | 3.33671 | 3.37332 | 0.00583 | 0.13977 | — | 0.13977 | 0.12859 | — | 0.12859 | — | 573.300 | 573.300 | 0.02326 | 0.00465 | — | 575.267 |
| Dust From Material Movement | — | — | — | — | — | 0.91447 | 0.91447 | — | 0.46998 | 0.46998 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07251 | 0.04927 | 0.68966 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.793 | 121.793 | 0.00674 | 0.00481 | 0.44619 | 123.841 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07097 | 0.06293 | 0.65338 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 114.817 | 114.817 | 0.00790 | 0.00520 | 0.01160 | 116.575 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04613 | 0.03799 | 0.40813 | 0.00000 | 0.00000 | 0.07518 | 0.07518 | 0.00000 | 0.01760 | 0.01760 | — | 75.3993 | 75.3993 | 0.00491 | 0.00340 | 0.12601 | 76.6603 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00842 | 0.00693 | 0.07448 | 0.00000 | 0.00000 | 0.01372 | 0.01372 | 0.00000 | 0.00321 | 0.00321 | — | 12.4832 | 12.4832 | 0.00081 | 0.00056 | 0.02086 | 12.6920 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.05170 | 27.9724 | 28.2794 | 0.04891 | 1.17173 | — | 1.17173 | 1.07799 | — | 1.07799 | — | 5,297.82 | 5,297.82 | 0.21490 | 0.04298 | — | 5,316.00 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99465 | 18.2833 | 18.4840 | 0.03197 | 0.76587 | — | 0.76587 | 0.70460 | — | 0.70460 | — | 3,462.76 | 3,462.76 | 0.14046 | 0.02809 | — | 3,474.65 |
| Dust From Material Movement | — | — | — | — | — | 5.01081 | 5.01081 | — | 2.57523 | 2.57523 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36402 | 3.33671 | 3.37332 | 0.00583 | 0.13977 | — | 0.13977 | 0.12859 | — | 0.12859 | — | 573.300 | 573.300 | 0.02326 | 0.00465 | — | 575.267 |
| Dust From Material Movement | — | — | — | — | — | 0.91447 | 0.91447 | — | 0.46998 | 0.46998 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07251 | 0.04927 | 0.68966 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.793 | 121.793 | 0.00674 | 0.00481 | 0.44619 | 123.841 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07097 | 0.06293 | 0.65338 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 114.817 | 114.817 | 0.00790 | 0.00520 | 0.01160 | 116.575 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04613 | 0.03799 | 0.40813 | 0.00000 | 0.00000 | 0.07518 | 0.07518 | 0.00000 | 0.01760 | 0.01760 | — | 75.3993 | 75.3993 | 0.00491 | 0.00340 | 0.12601 | 76.6603 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00842 | 0.00693 | 0.07448 | 0.00000 | 0.00000 | 0.01372 | 0.01372 | 0.00000 | 0.00321 | 0.00321 | — | 12.4832 | 12.4832 | 0.00081 | 0.00056 | 0.02086 | 12.6920 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.7. Grading (2025)

### 3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19393 | 1.80044 | 1.71744 | 0.00370 | 0.07492 | — | 0.07492 | 0.06893 | — | 0.06893 | — | 400.322 | 400.322 | 0.01624 | 0.00325 | — | 401.696 |
| Dust From Material Movement | — | — | — | — | — | 0.22067 | 0.22067 | — | 0.08689 | 0.08689 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03539 | 0.32858 | 0.31343 | 0.00067 | 0.01367 | — | 0.01367 | 0.01258 | — | 0.01258 | — | 66.2779 | 66.2779 | 0.00269 | 0.00054 | — | 66.5053 |
| Dust From Material Movement | — | — | — | — | — | 0.04027 | 0.04027 | — | 0.01586 | 0.01586 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.57717 | 3.44242 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 7,136.65 | 7,136.65 | 0.43553 | 1.12841 | 0.37997 | 7,484.19 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00557 | 0.00464 | 0.04962 | 0.00000 | 0.00000 | 0.00797 | 0.00797 | 0.00000 | 0.00187 | 0.00187 | — | 8.30554 | 8.30554 | 0.00055 | 0.00036 | 0.01568 | 8.44229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00947 | 0.57033 | 0.20750 | 0.00280 | 0.00801 | 0.10803 | 0.11604 | 0.00801 | 0.03034 | 0.03835 | — | 432.834 | 432.834 | 0.02642 | 0.06846 | 0.38546 | 454.280 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00102 | 0.00085 | 0.00906 | 0.00000 | 0.00000 | 0.00146 | 0.00146 | 0.00000 | 0.00034 | 0.00034 | — | 1.37508 | 1.37508 | 0.00009 | 0.00006 | 0.00260 | 1.39772 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00173 | 0.10408 | 0.03787 | 0.00051 | 0.00146 | 0.01972 | 0.02118 | 0.00146 | 0.00554 | 0.00700 | — | 71.6606 | 71.6606 | 0.00437 | 0.01133 | 0.06382 | 75.2112 |

### 3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19393 | 1.80044 | 1.71744 | 0.00370 | 0.07492 | — | 0.07492 | 0.06893 | — | 0.06893 | — | 400.322 | 400.322 | 0.01624 | 0.00325 | — | 401.696 |
| Dust From Material Movement | — | — | — | — | — | 0.22067 | 0.22067 | — | 0.08689 | 0.08689 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03539 | 0.32858 | 0.31343 | 0.00067 | 0.01367 | — | 0.01367 | 0.01258 | — | 0.01258 | — | 66.2779 | 66.2779 | 0.00269 | 0.00054 | — | 66.5053 |
| Dust From Material Movement | — | — | — | — | — | 0.04027 | 0.04027 | — | 0.01586 | 0.01586 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.57717 | 3.44242 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 7,136.65 | 7,136.65 | 0.43553 | 1.12841 | 0.37997 | 7,484.19 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00557 | 0.00464 | 0.04962 | 0.00000 | 0.00000 | 0.00797 | 0.00797 | 0.00000 | 0.00187 | 0.00187 | — | 8.30554 | 8.30554 | 0.00055 | 0.00036 | 0.01568 | 8.44229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00947 | 0.57033 | 0.20750 | 0.00280 | 0.00801 | 0.10803 | 0.11604 | 0.00801 | 0.03034 | 0.03835 | — | 432.834 | 432.834 | 0.02642 | 0.06846 | 0.38546 | 454.280 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00102 | 0.00085 | 0.00906 | 0.00000 | 0.00000 | 0.00146 | 0.00146 | 0.00000 | 0.00034 | 0.00034 | — | 1.37508 | 1.37508 | 0.00009 | 0.00006 | 0.00260 | 1.39772 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00173 | 0.10408 | 0.03787 | 0.00051 | 0.00146 | 0.01972 | 0.02118 | 0.00146 | 0.00554 | 0.00700 | — | 71.6606 | 71.6606 | 0.00437 | 0.01133 | 0.06382 | 75.2112 |

## 3.8. Grading (2026)

### 3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.17429 | 19.4466 | 19.6933 | 0.04352 | 0.80098 | — | 0.80098 | 0.73690 | — | 0.73690 | — | 4,713.27 | 4,713.27 | 0.19119 | 0.03824 | — | 4,729.44 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.39681 | 3.54901 | 3.59403 | 0.00794 | 0.14618 | — | 0.14618 | 0.13448 | — | 0.13448 | — | 780.335 | 780.335 | 0.03165 | 0.00633 | — | 783.013 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.78311 | 3.27304 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,990.82 | 6,990.82 | 0.38933 | 1.12621 | 13.7771 | 7,349.94 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.26043 | 3.31044 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,994.14 | 6,994.14 | 0.38933 | 1.12841 | 0.35732 | 7,340.49 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06280 | 0.05106 | 0.54665 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 95.9533 | 95.9533 | 0.00645 | 0.00424 | 0.17060 | 97.5493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.48576 | 2.34889 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,994.44 | 4,994.44 | 0.27810 | 0.80443 | 4.24638 | 5,245.36 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01146 | 0.00932 | 0.09976 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.8862 | 15.8862 | 0.00107 | 0.00070 | 0.02824 | 16.1504 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.18365 | 0.42867 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 826.886 | 826.886 | 0.04604 | 0.13318 | 0.70304 | 868.429 |

### 3.8.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.17429 | 19.4466 | 19.6933 | 0.04352 | 0.80098 | — | 0.80098 | 0.73690 | — | 0.73690 | — | 4,713.27 | 4,713.27 | 0.19119 | 0.03824 | — | 4,729.44 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.39681 | 3.54901 | 3.59403 | 0.00794 | 0.14618 | — | 0.14618 | 0.13448 | — | 0.13448 | — | 780.335 | 780.335 | 0.03165 | 0.00633 | — | 783.013 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.78311 | 3.27304 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,990.82 | 6,990.82 | 0.38933 | 1.12621 | 13.7771 | 7,349.94 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 9.26043 | 3.31044 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,994.14 | 6,994.14 | 0.38933 | 1.12841 | 0.35732 | 7,340.49 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06280 | 0.05106 | 0.54665 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 95.9533 | 95.9533 | 0.00645 | 0.00424 | 0.17060 | 97.5493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.48576 | 2.34889 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,994.44 | 4,994.44 | 0.27810 | 0.80443 | 4.24638 | 5,245.36 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01146 | 0.00932 | 0.09976 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.8862 | 15.8862 | 0.00107 | 0.00070 | 0.02824 | 16.1504 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.18365 | 0.42867 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 826.886 | 826.886 | 0.04604 | 0.13318 | 0.70304 | 868.429 |

## 3.9. Grading (2027)

### 3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.10390 | 18.2715 | 19.4869 | 0.04352 | 0.74505 | — | 0.74505 | 0.68544 | — | 0.68544 | — | 4,712.91 | 4,712.91 | 0.19118 | 0.03824 | — | 4,729.09 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38396 | 3.33455 | 3.55636 | 0.00794 | 0.13597 | — | 0.13597 | 0.12509 | — | 0.12509 | — | 780.277 | 780.277 | 0.03165 | 0.00633 | — | 782.954 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08287 | 0.05631 | 0.78818 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 139.192 | 139.192 | 0.00770 | 0.00550 | 0.50993 | 141.533 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.50596 | 3.18506 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,831.14 | 6,831.14 | 0.38933 | 1.08222 | 12.6448 | 7,176.02 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08110 | 0.07192 | 0.74671 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.220 | 131.220 | 0.00903 | 0.00594 | 0.01326 | 133.229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.94148 | 3.22025 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,834.52 | 6,834.52 | 0.38713 | 1.08222 | 0.32839 | 7,167.03 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05762 | 0.04744 | 0.50973 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 94.1685 | 94.1685 | 0.00613 | 0.00424 | 0.15738 | 95.7433 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.28936 | 2.28604 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,880.40 | 4,880.40 | 0.27810 | 0.77301 | 3.90487 | 5,121.61 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01051 | 0.00866 | 0.09303 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.5907 | 15.5907 | 0.00102 | 0.00070 | 0.02606 | 15.8514 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.14781 | 0.41720 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 808.006 | 808.006 | 0.04604 | 0.12798 | 0.64650 | 847.942 |

### 3.9.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.94546 | 25.5801 | 27.2816 | 0.06093 | 1.04307 | — | 1.04307 | 0.95962 | — | 0.95962 | — | 6,598.08 | 6,598.08 | 0.26765 | 0.05353 | — | 6,620.72 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.10390 | 18.2715 | 19.4869 | 0.04352 | 0.74505 | — | 0.74505 | 0.68544 | — | 0.68544 | — | 4,712.91 | 4,712.91 | 0.19118 | 0.03824 | — | 4,729.09 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38396 | 3.33455 | 3.55636 | 0.00794 | 0.13597 | — | 0.13597 | 0.12509 | — | 0.12509 | — | 780.277 | 780.277 | 0.03165 | 0.00633 | — | 782.954 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08287 | 0.05631 | 0.78818 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 139.192 | 139.192 | 0.00770 | 0.00550 | 0.50993 | 141.533 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.50596 | 3.18506 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,831.14 | 6,831.14 | 0.38933 | 1.08222 | 12.6448 | 7,176.02 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08110 | 0.07192 | 0.74671 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.220 | 131.220 | 0.00903 | 0.00594 | 0.01326 | 133.229 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.94148 | 3.22025 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,834.52 | 6,834.52 | 0.38713 | 1.08222 | 0.32839 | 7,167.03 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05762 | 0.04744 | 0.50973 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 94.1685 | 94.1685 | 0.00613 | 0.00424 | 0.15738 | 95.7433 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 6.28936 | 2.28604 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.09427 | 0.35728 | 0.45155 | — | 4,880.40 | 4,880.40 | 0.27810 | 0.77301 | 3.90487 | 5,121.61 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01051 | 0.00866 | 0.09303 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.5907 | 15.5907 | 0.00102 | 0.00070 | 0.02606 | 15.8514 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.14781 | 0.41720 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01720 | 0.06520 | 0.08241 | — | 808.006 | 808.006 | 0.04604 | 0.12798 | 0.64650 | 847.942 |

## 3.10. Grading (2028)

### 3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.06136 | 17.4254 | 19.4595 | 0.04364 | 0.70557 | — | 0.70557 | 0.64913 | — | 0.64913 | — | 4,725.96 | 4,725.96 | 0.19171 | 0.03834 | — | 4,742.17 |
| Dust From Material Movement | — | — | — | — | — | 2.60532 | 2.60532 | — | 1.02584 | 1.02584 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.37620 | 3.18014 | 3.55136 | 0.00796 | 0.12877 | — | 0.12877 | 0.11847 | — | 0.11847 | — | 782.436 | 782.436 | 0.03174 | 0.00635 | — | 785.121 |
| Dust From Material Movement | — | — | — | — | — | 0.47547 | 0.47547 | — | 0.18721 | 0.18721 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08066 | 0.05125 | 0.73672 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.661 | 136.661 | 0.00770 | 0.00550 | 0.46873 | 138.961 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.18041 | 3.05088 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,655.29 | 6,655.29 | 0.34314 | 1.03822 | 11.6382 | 6,984.89 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07890 | 0.06686 | 0.70249 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 128.846 | 128.846 | 0.00485 | 0.00594 | 0.01212 | 130.749 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.65993 | 3.08828 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,658.74 | 6,658.74 | 0.34314 | 1.03822 | 0.30134 | 6,977.01 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05556 | 0.04395 | 0.47804 | 0.00000 | 0.00000 | 0.09415 | 0.09415 | 0.00000 | 0.02204 | 0.02204 | — | 92.7206 | 92.7206 | 0.00284 | 0.00425 | 0.14498 | 94.2043 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11186 | 6.10493 | 2.19620 | 0.03308 | 0.09453 | 1.27550 | 1.37002 | 0.09453 | 0.35826 | 0.45279 | — | 4,767.84 | 4,767.84 | 0.24577 | 0.74362 | 3.59115 | 4,999.17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01014 | 0.00802 | 0.08724 | 0.00000 | 0.00000 | 0.01718 | 0.01718 | 0.00000 | 0.00402 | 0.00402 | — | 15.3510 | 15.3510 | 0.00047 | 0.00070 | 0.02400 | 15.5966 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02041 | 1.11415 | 0.40081 | 0.00604 | 0.01725 | 0.23278 | 0.25003 | 0.01725 | 0.06538 | 0.08263 | — | 789.370 | 789.370 | 0.04069 | 0.12311 | 0.59456 | 827.670 |

### 3.10.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.87803 | 24.3289 | 27.1688 | 0.06093 | 0.98510 | — | 0.98510 | 0.90629 | — | 0.90629 | — | 6,598.26 | 6,598.26 | 0.26765 | 0.05353 | — | 6,620.90 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.06136 | 17.4254 | 19.4595 | 0.04364 | 0.70557 | — | 0.70557 | 0.64913 | — | 0.64913 | — | 4,725.96 | 4,725.96 | 0.19171 | 0.03834 | — | 4,742.17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 2.60532 | 2.60532 | — | 1.02584 | 1.02584 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.37620 | 3.18014 | 3.55136 | 0.00796 | 0.12877 | — | 0.12877 | 0.11847 | — | 0.11847 | — | 782.436 | 782.436 | 0.03174 | 0.00635 | — | 785.121 |
| Dust From Material Movement | — | — | — | — | — | 0.47547 | 0.47547 | — | 0.18721 | 0.18721 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08066 | 0.05125 | 0.73672 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.661 | 136.661 | 0.00770 | 0.00550 | 0.46873 | 138.961 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 8.18041 | 3.05088 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,655.29 | 6,655.29 | 0.34314 | 1.03822 | 11.6382 | 6,984.89 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07890 | 0.06686 | 0.70249 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 128.846 | 128.846 | 0.00485 | 0.00594 | 0.01212 | 130.749 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.65993 | 3.08828 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.13198 | 0.50644 | 0.63842 | — | 6,658.74 | 6,658.74 | 0.34314 | 1.03822 | 0.30134 | 6,977.01 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.05556 | 0.04395 | 0.47804 | 0.00000 | 0.00000 | 0.09415 | 0.09415 | 0.00000 | 0.02204 | 0.02204 | — | 92.7206 | 92.7206 | 0.00284 | 0.00425 | 0.14498 | 94.2043 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11186 | 6.10493 | 2.19620 | 0.03308 | 0.09453 | 1.27550 | 1.37002 | 0.09453 | 0.35826 | 0.45279 | — | 4,767.84 | 4,767.84 | 0.24577 | 0.74362 | 3.59115 | 4,999.17 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01014 | 0.00802 | 0.08724 | 0.00000 | 0.00000 | 0.01718 | 0.01718 | 0.00000 | 0.00402 | 0.00402 | — | 15.3510 | 15.3510 | 0.00047 | 0.00070 | 0.02400 | 15.5966 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02041 | 1.11415 | 0.40081 | 0.00604 | 0.01725 | 0.23278 | 0.25003 | 0.01725 | 0.06538 | 0.08263 | — | 789.370 | 789.370 | 0.04069 | 0.12311 | 0.59456 | 827.670 |

## 3.11. Grading (2029)

### 3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99451 | 16.2364 | 19.1914 | 0.04351 | 0.65439 | — | 0.65439 | 0.60204 | — | 0.60204 | — | 4,711.52 | 4,711.52 | 0.19112 | 0.03822 | — | 4,727.69 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36400 | 2.96315 | 3.50243 | 0.00794 | 0.11943 | — | 0.11943 | 0.10987 | — | 0.10987 | — | 780.046 | 780.046 | 0.03164 | 0.00633 | — | 782.723 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07714 | 0.04619 | 0.68944 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 134.241 | 134.241 | 0.00353 | 0.00550 | 0.42812 | 136.396 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.16057 | 7.89886 | 2.92110 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,474.04 | 6,474.04 | 0.34094 | 1.03822 | 10.5688 | 6,802.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.07493 | 0.06180 | 0.65410 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 126.579 | 126.579 | 0.00441 | 0.00594 | 0.01111 | 128.470 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.33439 | 2.95630 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,477.56 | 6,477.56 | 0.34094 | 1.03822 | 0.27428 | 6,795.75 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05321 | 0.04022 | 0.44704 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 90.8393 | 90.8393 | 0.00283 | 0.00424 | 0.13222 | 92.3066 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 5.85572 | 2.09750 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.06285 | 0.35728 | 0.42013 | — | 4,625.37 | 4,625.37 | 0.24353 | 0.74159 | 3.26230 | 4,855.71 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00971 | 0.00734 | 0.08158 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.0395 | 15.0395 | 0.00047 | 0.00070 | 0.02189 | 15.2824 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.06867 | 0.38279 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01147 | 0.06520 | 0.07667 | — | 765.783 | 765.783 | 0.04032 | 0.12278 | 0.54011 | 803.919 |

### 3.11.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.79232 | 22.7310 | 26.8680 | 0.06092 | 0.91614 | — | 0.91614 | 0.84285 | — | 0.84285 | — | 6,596.13 | 6,596.13 | 0.26757 | 0.05351 | — | 6,618.77 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.99451 | 16.2364 | 19.1914 | 0.04351 | 0.65439 | — | 0.65439 | 0.60204 | — | 0.60204 | — | 4,711.52 | 4,711.52 | 0.19112 | 0.03822 | — | 4,727.69 |
| Dust From Material Movement | — | — | — | — | — | 2.59820 | 2.59820 | — | 1.02303 | 1.02303 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36400 | 2.96315 | 3.50243 | 0.00794 | 0.11943 | — | 0.11943 | 0.10987 | — | 0.10987 | — | 780.046 | 780.046 | 0.03164 | 0.00633 | — | 782.723 |
| Dust From Material Movement | — | — | — | — | — | 0.47417 | 0.47417 | — | 0.18670 | 0.18670 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07714 | 0.04619 | 0.68944 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 134.241 | 134.241 | 0.00353 | 0.00550 | 0.42812 | 136.396 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.16057 | 7.89886 | 2.92110 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,474.04 | 6,474.04 | 0.34094 | 1.03822 | 10.5688 | 6,802.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07493 | 0.06180 | 0.65410 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 126.579 | 126.579 | 0.00441 | 0.00594 | 0.01111 | 128.470 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.15177 | 8.33439 | 2.95630 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,477.56 | 6,477.56 | 0.34094 | 1.03822 | 0.27428 | 6,795.75 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05321 | 0.04022 | 0.44704 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 90.8393 | 90.8393 | 0.00283 | 0.00424 | 0.13222 | 92.3066 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11155 | 5.85572 | 2.09750 | 0.03299 | 0.09427 | 1.27201 | 1.36628 | 0.06285 | 0.35728 | 0.42013 | — | 4,625.37 | 4,625.37 | 0.24353 | 0.74159 | 3.26230 | 4,855.71 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00971 | 0.00734 | 0.08158 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 15.0395 | 15.0395 | 0.00047 | 0.00070 | 0.02189 | 15.2824 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02036 | 1.06867 | 0.38279 | 0.00602 | 0.01720 | 0.23214 | 0.24935 | 0.01147 | 0.06520 | 0.07667 | — | 765.783 | 765.783 | 0.04032 | 0.12278 | 0.54011 | 803.919 |

## 3.12. Grading (2030)

### 3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.28715 | 10.2597 | 12.7157 | 0.02885 | 0.41900 | — | 0.41900 | 0.38548 | — | 0.38548 | — | 3,123.75 | 3,123.75 | 0.12671 | 0.02534 | — | 3,134.47 |
| Dust From Material Movement | — | — | — | — | — | 1.72264 | 1.72264 | — | 0.67828 | 0.67828 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23490 | 1.87240 | 2.32061 | 0.00526 | 0.07647 | — | 0.07647 | 0.07035 | — | 0.07035 | — | 517.173 | 517.173 | 0.02098 | 0.00420 | — | 518.947 |
| Dust From Material Movement | — | — | — | — | — | 0.31438 | 0.31438 | — | 0.12379 | 0.12379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07317 | 0.04157 | 0.64722 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.941 | 131.941 | 0.00309 | 0.00550 | 0.38931 | 134.046 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11658 | 7.66130 | 2.78913 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,294.45 | 6,294.45 | 0.29475 | 0.99423 | 9.56222 | 6,607.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07273 | 0.05675 | 0.61449 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 124.423 | 124.423 | 0.00441 | 0.00594 | 0.01009 | 126.314 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.10778 | 8.09903 | 2.82432 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,298.02 | 6,298.02 | 0.29475 | 0.99423 | 0.24849 | 6,601.92 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03382 | 0.02427 | 0.27670 | 0.00000 | 0.00000 | 0.06225 | 0.06225 | 0.00000 | 0.01457 | 0.01457 | — | 59.2029 | 59.2029 | 0.00167 | 0.00260 | 0.07974 | 60.1004 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.05313 | 3.77096 | 1.32817 | 0.02188 | 0.06250 | 0.84336 | 0.90586 | 0.04167 | 0.23688 | 0.27855 | — | 2,981.64 | 2,981.64 | 0.13959 | 0.47085 | 1.96036 | 3,127.41 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00617 | 0.00443 | 0.05050 | 0.00000 | 0.00000 | 0.01136 | 0.01136 | 0.00000 | 0.00266 | 0.00266 | — | 9.80172 | 9.80172 | 0.00028 | 0.00043 | 0.01320 | 9.95031 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00970 | 0.68820 | 0.24239 | 0.00399 | 0.01141 | 0.15391 | 0.16532 | 0.00760 | 0.04323 | 0.05084 | — | 493.645 | 493.645 | 0.02311 | 0.07795 | 0.32456 | 517.778 |

### 3.12.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.71790 | 21.6641 | 26.8500 | 0.06092 | 0.88475 | — | 0.88475 | 0.81397 | — | 0.81397 | — | 6,596.02 | 6,596.02 | 0.26756 | 0.05351 | — | 6,618.66 |
| Dust From Material Movement | — | — | — | — | — | 3.63748 | 3.63748 | — | 1.43225 | 1.43225 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.28715 | 10.2597 | 12.7157 | 0.02885 | 0.41900 | — | 0.41900 | 0.38548 | — | 0.38548 | — | 3,123.75 | 3,123.75 | 0.12671 | 0.02534 | — | 3,134.47 |
| Dust From Material Movement | — | — | — | — | — | 1.72264 | 1.72264 | — | 0.67828 | 0.67828 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23490 | 1.87240 | 2.32061 | 0.00526 | 0.07647 | — | 0.07647 | 0.07035 | — | 0.07035 | — | 517.173 | 517.173 | 0.02098 | 0.00420 | — | 518.947 |
| Dust From Material Movement | — | — | — | — | — | 0.31438 | 0.31438 | — | 0.12379 | 0.12379 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07317 | 0.04157 | 0.64722 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 131.941 | 131.941 | 0.00309 | 0.00550 | 0.38931 | 134.046 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.11658 | 7.66130 | 2.78913 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,294.45 | 6,294.45 | 0.29475 | 0.99423 | 9.56222 | 6,607.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07273 | 0.05675 | 0.61449 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 124.423 | 124.423 | 0.00441 | 0.00594 | 0.01009 | 126.314 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.10778 | 8.09903 | 2.82432 | 0.04619 | 0.13198 | 1.80581 | 1.93778 | 0.08799 | 0.50644 | 0.59443 | — | 6,298.02 | 6,298.02 | 0.29475 | 0.99423 | 0.24849 | 6,601.92 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03382 | 0.02427 | 0.27670 | 0.00000 | 0.00000 | 0.06225 | 0.06225 | 0.00000 | 0.01457 | 0.01457 | — | 59.2029 | 59.2029 | 0.00167 | 0.00260 | 0.07974 | 60.1004 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.05313 | 3.77096 | 1.32817 | 0.02188 | 0.06250 | 0.84336 | 0.90586 | 0.04167 | 0.23688 | 0.27855 | — | 2,981.64 | 2,981.64 | 0.13959 | 0.47085 | 1.96036 | 3,127.41 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00617 | 0.00443 | 0.05050 | 0.00000 | 0.00000 | 0.01136 | 0.01136 | 0.00000 | 0.00266 | 0.00266 | — | 9.80172 | 9.80172 | 0.00028 | 0.00043 | 0.01320 | 9.95031 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00970 | 0.68820 | 0.24239 | 0.00399 | 0.01141 | 0.15391 | 0.16532 | 0.00760 | 0.04323 | 0.05084 | — | 493.645 | 493.645 | 0.02311 | 0.07795 | 0.32456 | 517.778 |

## 3.13. Building Construction (2023)

### 3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 48.5765 | 36.3113 | 473.902 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 67,587.8 | 67,587.8 | 4.06060 | 2.67202 | 311.614 | 68,797.2 |
| Vendor | 1.50560 | 42.0795 | 21.9716 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,193.0 | 27,193.0 | 1.24141 | 3.96515 | 69.0780 | 28,474.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 46.1028 | 45.8092 | 448.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,673.1 | 63,673.1 | 4.65571 | 2.87039 | 8.05898 | 64,652.9 |
| Vendor | 1.38779 | 44.4445 | 22.4117 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,212.2 | 27,212.2 | 1.21196 | 3.96515 | 1.79552 | 28,425.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.6133 | 30.7279 | 305.103 | 0.00000 | 0.00000 | 42.1247 | 42.1247 | 0.00000 | 9.86211 | 9.86211 | — | 45,566.3 | 45,566.3 | 3.17509 | 1.90336 | 95.6773 | 46,308.6 |
| Vendor | 1.03052 | 31.1753 | 15.6707 | 0.12651 | 0.25301 | 4.74149 | 4.99450 | 0.25301 | 1.31188 | 1.56489 | — | 19,376.0 | 19,376.0 | 0.88429 | 2.82449 | 21.3468 | 20,261.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.13442 | 5.60784 | 55.6812 | 0.00000 | 0.00000 | 7.68776 | 7.68776 | 0.00000 | 1.79984 | 1.79984 | — | 7,544.02 | 7,544.02 | 0.52567 | 0.31512 | 15.8405 | 7,666.91 |
| Vendor | 0.18807 | 5.68950 | 2.85991 | 0.02309 | 0.04618 | 0.86532 | 0.91150 | 0.04618 | 0.23942 | 0.28559 | — | 3,207.92 | 3,207.92 | 0.14640 | 0.46763 | 3.53421 | 3,354.47 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 48.5765 | 36.3113 | 473.902 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 67,587.8 | 67,587.8 | 4.06060 | 2.67202 | 311.614 | 68,797.2 |
| Vendor | 1.50560 | 42.0795 | 21.9716 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,193.0 | 27,193.0 | 1.24141 | 3.96515 | 69.0780 | 28,474.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 46.1028 | 45.8092 | 448.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,673.1 | 63,673.1 | 4.65571 | 2.87039 | 8.05898 | 64,652.9 |
| Vendor | 1.38779 | 44.4445 | 22.4117 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 27,212.2 | 27,212.2 | 1.21196 | 3.96515 | 1.79552 | 28,425.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.6133 | 30.7279 | 305.103 | 0.00000 | 0.00000 | 42.1247 | 42.1247 | 0.00000 | 9.86211 | 9.86211 | — | 45,566.3 | 45,566.3 | 3.17509 | 1.90336 | 95.6773 | 46,308.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 1.03052 | 31.1753 | 15.6707 | 0.12651 | 0.25301 | 4.74149 | 4.99450 | 0.25301 | 1.31188 | 1.56489 | — | 19,376.0 | 19,376.0 | 0.88429 | 2.82449 | 21.3468 | 20,261.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.13442 | 5.60784 | 55.6812 | 0.00000 | 0.00000 | 7.68776 | 7.68776 | 0.00000 | 1.79984 | 1.79984 | — | 7,544.02 | 7,544.02 | 0.52567 | 0.31512 | 15.8405 | 7,666.91 |
| Vendor | 0.18807 | 5.68950 | 2.85991 | 0.02309 | 0.04618 | 0.86532 | 0.91150 | 0.04618 | 0.23942 | 0.28559 | — | 3,207.92 | 3,207.92 | 0.14640 | 0.46763 | 3.53421 | 3,354.47 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.14. Building Construction (2024)

### 3.14.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 44.7142 | 32.1575 | 439.773 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 66,330.6 | 66,330.6 | 3.86223 | 2.67202 | 290.123 | 67,513.6 |
| Vendor | 1.47614 | 40.4223 | 20.3741 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,800.1 | 26,800.1 | 1.18251 | 3.96515 | 69.0780 | 28,080.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 43.9208 | 41.4570 | 416.895 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,505.2 | 62,505.2 | 4.65571 | 2.67202 | 7.52171 | 63,425.4 |
| Vendor | 1.21019 | 42.6097 | 20.7847 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,821.5 | 26,821.5 | 1.21196 | 3.96515 | 1.79044 | 28,035.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.0317 | 27.7795 | 283.604 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 44,976.9 | 44,976.9 | 3.05046 | 1.91382 | 89.6612 | 45,713.2 |
| Vendor | 1.01509 | 29.9052 | 14.7188 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 19,201.7 | 19,201.7 | 0.86806 | 2.84001 | 21.2822 | 20,091.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.66328 | 5.06975 | 51.7578 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 7,446.45 | 7,446.45 | 0.50504 | 0.31685 | 14.8444 | 7,568.34 |
| Vendor | 0.18525 | 5.45770 | 2.68618 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 3,179.06 | 3,179.06 | 0.14372 | 0.47020 | 3.52352 | 3,326.29 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 44.7142 | 32.1575 | 439.773 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 66,330.6 | 66,330.6 | 3.86223 | 2.67202 | 290.123 | 67,513.6 |
| Vendor | 1.47614 | 40.4223 | 20.3741 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,800.1 | 26,800.1 | 1.18251 | 3.96515 | 69.0780 | 28,080.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 43.9208 | 41.4570 | 416.895 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,505.2 | 62,505.2 | 4.65571 | 2.67202 | 7.52171 | 63,425.4 |
| Vendor | 1.21019 | 42.6097 | 20.7847 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,821.5 | 26,821.5 | 1.21196 | 3.96515 | 1.79044 | 28,035.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.0317 | 27.7795 | 283.604 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 44,976.9 | 44,976.9 | 3.05046 | 1.91382 | 89.6612 | 45,713.2 |
| Vendor | 1.01509 | 29.9052 | 14.7188 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 19,201.7 | 19,201.7 | 0.86806 | 2.84001 | 21.2822 | 20,091.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.66328 | 5.06975 | 51.7578 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 7,446.45 | 7,446.45 | 0.50504 | 0.31685 | 14.8444 | 7,568.34 |
| Vendor | 0.18525 | 5.45770 | 2.68618 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 3,179.06 | 3,179.06 | 0.14372 | 0.47020 | 3.52352 | 3,326.29 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.15. Building Construction (2025)

### 3.15.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.7305 | 29.6839 | 407.919 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 65,049.3 | 65,049.3 | 3.66386 | 2.67202 | 268.633 | 66,205.7 |
| Vendor | 1.23964 | 38.5285 | 18.9837 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,327.0 | 26,327.0 | 1.18251 | 3.78755 | 68.5701 | 27,553.8 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.1354 | 38.9834 | 387.304 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,308.1 | 61,308.1 | 4.45734 | 2.67202 | 6.98445 | 62,222.7 |
| Vendor | 1.21019 | 40.5678 | 19.5130 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,350.5 | 26,350.5 | 1.18251 | 3.78755 | 1.78282 | 27,510.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 29.5300 | 24.5949 | 262.827 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,995.4 | 43,995.4 | 2.90043 | 1.90859 | 83.0842 | 44,719.8 |
| Vendor | 0.88546 | 28.4708 | 13.7912 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,812.0 | 18,812.0 | 0.84465 | 2.70539 | 21.2241 | 19,660.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.38922 | 4.48856 | 47.9659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,283.94 | 7,283.94 | 0.48020 | 0.31599 | 13.7555 | 7,403.87 |
| Vendor | 0.16160 | 5.19592 | 2.51689 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,114.54 | 3,114.54 | 0.13984 | 0.44791 | 3.51389 | 3,255.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.7305 | 29.6839 | 407.919 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 65,049.3 | 65,049.3 | 3.66386 | 2.67202 | 268.633 | 66,205.7 |
| Vendor | 1.23964 | 38.5285 | 18.9837 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,327.0 | 26,327.0 | 1.18251 | 3.78755 | 68.5701 | 27,553.8 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 42.1354 | 38.9834 | 387.304 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,308.1 | 61,308.1 | 4.45734 | 2.67202 | 6.98445 | 62,222.7 |
| Vendor | 1.21019 | 40.5678 | 19.5130 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 26,350.5 | 26,350.5 | 1.18251 | 3.78755 | 1.78282 | 27,510.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 29.5300 | 24.5949 | 262.827 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,995.4 | 43,995.4 | 2.90043 | 1.90859 | 83.0842 | 44,719.8 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.88546 | 28.4708 | 13.7912 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,812.0 | 18,812.0 | 0.84465 | 2.70539 | 21.2241 | 19,660.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.38922 | 4.48856 | 47.9659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,283.94 | 7,283.94 | 0.48020 | 0.31599 | 13.7555 | 7,403.87 |
| Vendor | 0.16160 | 5.19592 | 2.51689 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,114.54 | 3,114.54 | 0.13984 | 0.44791 | 3.51389 | 3,255.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.16. Building Construction (2026)

### 3.16.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.9452 | 27.4086 | 380.219 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,815.6 | 63,815.6 | 3.66386 | 2.67202 | 249.022 | 64,952.5 |
| Vendor | 1.21019 | 36.8123 | 17.7709 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,835.6 | 25,835.6 | 1.18251 | 3.78755 | 62.2210 | 27,056.1 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.1518 | 34.6312 | 360.584 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,155.5 | 60,155.5 | 4.25897 | 2.67202 | 6.44718 | 61,064.7 |
| Vendor | 1.12183 | 38.8516 | 18.2412 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,860.8 | 25,860.8 | 1.15305 | 3.78755 | 1.61521 | 27,019.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 28.2547 | 22.9696 | 245.933 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,168.6 | 43,168.6 | 2.90043 | 1.90859 | 76.7521 | 43,886.6 |
| Vendor | 0.84338 | 27.2450 | 12.9039 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,461.5 | 18,461.5 | 0.84465 | 2.70539 | 19.2287 | 19,308.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.15649 | 4.19196 | 44.8828 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,147.06 | 7,147.06 | 0.48020 | 0.31599 | 12.7072 | 7,265.93 |
| Vendor | 0.15392 | 4.97221 | 2.35495 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,056.51 | 3,056.51 | 0.13984 | 0.44791 | 3.18352 | 3,196.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.9452 | 27.4086 | 380.219 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 63,815.6 | 63,815.6 | 3.66386 | 2.67202 | 249.022 | 64,952.5 |
| Vendor | 1.21019 | 36.8123 | 17.7709 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,835.6 | 25,835.6 | 1.18251 | 3.78755 | 62.2210 | 27,056.1 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 40.1518 | 34.6312 | 360.584 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,155.5 | 60,155.5 | 4.25897 | 2.67202 | 6.44718 | 61,064.7 |
| Vendor | 1.12183 | 38.8516 | 18.2412 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,860.8 | 25,860.8 | 1.15305 | 3.78755 | 1.61521 | 27,019.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 28.2547 | 22.9696 | 245.933 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 43,168.6 | 43,168.6 | 2.90043 | 1.90859 | 76.7521 | 43,886.6 |
| Vendor | 0.84338 | 27.2450 | 12.9039 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,461.5 | 18,461.5 | 0.84465 | 2.70539 | 19.2287 | 19,308.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 5.15649 | 4.19196 | 44.8828 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,147.06 | 7,147.06 | 0.48020 | 0.31599 | 12.7072 | 7,265.93 |
| Vendor | 0.15392 | 4.97221 | 2.35495 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 3,056.51 | 3,056.51 | 0.13984 | 0.44791 | 3.18352 | 3,196.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.17. Building Construction (2027)

### 3.17.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 37.2814 | 25.3316 | 354.595 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,621.2 | 62,621.2 | 3.46550 | 2.47365 | 229.412 | 63,674.4 |
| Vendor | 1.03259 | 35.2148 | 16.9132 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,283.7 | 25,283.7 | 0.97546 | 3.60996 | 55.1101 | 26,439.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.4879 | 32.3559 | 335.941 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,034.8 | 59,034.8 | 4.06060 | 2.67202 | 5.96364 | 59,938.5 |
| Vendor | 0.94424 | 37.2835 | 17.3541 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,309.9 | 25,309.9 | 0.97546 | 3.60996 | 1.43235 | 26,411.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 25.9211 | 21.3444 | 229.322 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 42,365.6 | 42,365.6 | 2.75874 | 1.90859 | 70.8039 | 43,074.2 |
| Vendor | 0.69549 | 26.1039 | 12.1644 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,067.6 | 18,067.6 | 0.69675 | 2.57854 | 17.0155 | 18,870.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.73060 | 3.89536 | 41.8513 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,014.11 | 7,014.11 | 0.45674 | 0.31599 | 11.7224 | 7,131.42 |
| Vendor | 0.12693 | 4.76396 | 2.22000 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,991.30 | 2,991.30 | 0.11536 | 0.42691 | 2.81712 | 3,124.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 37.2814 | 25.3316 | 354.595 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 62,621.2 | 62,621.2 | 3.46550 | 2.47365 | 229.412 | 63,674.4 |
| Vendor | 1.03259 | 35.2148 | 16.9132 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,283.7 | 25,283.7 | 0.97546 | 3.60996 | 55.1101 | 26,439.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.4879 | 32.3559 | 335.941 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,034.8 | 59,034.8 | 4.06060 | 2.67202 | 5.96364 | 59,938.5 |
| Vendor | 0.94424 | 37.2835 | 17.3541 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 25,309.9 | 25,309.9 | 0.97546 | 3.60996 | 1.43235 | 26,411.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 25.9211 | 21.3444 | 229.322 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 42,365.6 | 42,365.6 | 2.75874 | 1.90859 | 70.8039 | 43,074.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.69549 | 26.1039 | 12.1644 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 18,067.6 | 18,067.6 | 0.69675 | 2.57854 | 17.0155 | 18,870.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.73060 | 3.89536 | 41.8513 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 7,014.11 | 7,014.11 | 0.45674 | 0.31599 | 11.7224 | 7,131.42 |
| Vendor | 0.12693 | 4.76396 | 2.22000 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,991.30 | 2,991.30 | 0.11536 | 0.42691 | 2.81712 | 3,124.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.18. Building Construction (2028)

### 3.18.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.2895 | 23.0564 | 331.446 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,482.8 | 61,482.8 | 3.46550 | 2.47365 | 210.877 | 62,517.4 |
| Vendor | 1.00314 | 33.7655 | 15.9074 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,651.0 | 24,651.0 | 0.97546 | 3.58050 | 49.0149 | 25,791.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 35.4960 | 30.0806 | 316.047 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 57,966.7 | 57,966.7 | 2.18205 | 2.67202 | 5.45324 | 58,823.0 |
| Vendor | 0.94424 | 35.6566 | 16.4670 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,678.5 | 24,678.5 | 0.97546 | 3.60996 | 1.27236 | 25,779.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 24.9975 | 19.7733 | 215.066 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 41,714.3 | 41,714.3 | 1.27872 | 1.91382 | 65.2257 | 42,381.8 |
| Vendor | 0.69740 | 25.0101 | 11.5623 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 17,664.3 | 17,664.3 | 0.69866 | 2.58560 | 15.1704 | 18,467.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.56205 | 3.60862 | 39.2496 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 6,906.27 | 6,906.27 | 0.21171 | 0.31685 | 10.7989 | 7,016.79 |
| Vendor | 0.12728 | 4.56435 | 2.11013 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 2,924.52 | 2,924.52 | 0.11567 | 0.42808 | 2.51163 | 3,057.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 36.2895 | 23.0564 | 331.446 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 61,482.8 | 61,482.8 | 3.46550 | 2.47365 | 210.877 | 62,517.4 |
| Vendor | 1.00314 | 33.7655 | 15.9074 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,651.0 | 24,651.0 | 0.97546 | 3.58050 | 49.0149 | 25,791.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 35.4960 | 30.0806 | 316.047 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 57,966.7 | 57,966.7 | 2.18205 | 2.67202 | 5.45324 | 58,823.0 |
| Vendor | 0.94424 | 35.6566 | 16.4670 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 24,678.5 | 24,678.5 | 0.97546 | 3.60996 | 1.27236 | 25,779.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 24.9975 | 19.7733 | 215.066 | 0.00000 | 0.00000 | 42.3562 | 42.3562 | 0.00000 | 9.91630 | 9.91630 | — | 41,714.3 | 41,714.3 | 1.27872 | 1.91382 | 65.2257 | 42,381.8 |
| Vendor | 0.69740 | 25.0101 | 11.5623 | 0.12720 | 0.25440 | 4.76754 | 5.02195 | 0.25440 | 1.31909 | 1.57349 | — | 17,664.3 | 17,664.3 | 0.69866 | 2.58560 | 15.1704 | 18,467.4 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.56205 | 3.60862 | 39.2496 | 0.00000 | 0.00000 | 7.73000 | 7.73000 | 0.00000 | 1.80972 | 1.80972 | — | 6,906.27 | 6,906.27 | 0.21171 | 0.31685 | 10.7989 | 7,016.79 |
| Vendor | 0.12728 | 4.56435 | 2.11013 | 0.02321 | 0.04643 | 0.87008 | 0.91651 | 0.04643 | 0.24073 | 0.28716 | — | 2,924.52 | 2,924.52 | 0.11567 | 0.42808 | 2.51163 | 3,057.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19. Building Construction (2029)

### 3.19.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 34.7026 | 20.7811 | 310.175 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,394.0 | 60,394.0 | 1.58695 | 2.47365 | 192.610 | 61,363.4 |
| Vendor | 1.00314 | 32.2572 | 15.0792 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,959.1 | 23,959.1 | 0.94600 | 3.40291 | 43.4277 | 25,040.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.7107 | 27.8053 | 294.274 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 56,946.9 | 56,946.9 | 1.98368 | 2.67202 | 4.99656 | 57,797.7 |
| Vendor | 0.91479 | 34.0297 | 15.6094 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,987.7 | 23,987.7 | 0.94600 | 3.43236 | 1.12506 | 25,035.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 23.9374 | 18.0940 | 201.119 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,867.9 | 40,867.9 | 1.27523 | 1.90859 | 59.4829 | 41,528.0 |
| Vendor | 0.69549 | 23.7587 | 10.9602 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 17,122.1 | 17,122.1 | 0.67572 | 2.43065 | 13.3875 | 17,876.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.36858 | 3.30216 | 36.7042 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,766.14 | 6,766.14 | 0.21113 | 0.31599 | 9.84807 | 6,875.43 |
| Vendor | 0.12693 | 4.33596 | 2.00024 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,834.76 | 2,834.76 | 0.11187 | 0.40242 | 2.21645 | 2,959.70 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 34.7026 | 20.7811 | 310.175 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 60,394.0 | 60,394.0 | 1.58695 | 2.47365 | 192.610 | 61,363.4 |
| Vendor | 1.00314 | 32.2572 | 15.0792 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,959.1 | 23,959.1 | 0.94600 | 3.40291 | 43.4277 | 25,040.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 33.7107 | 27.8053 | 294.274 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 56,946.9 | 56,946.9 | 1.98368 | 2.67202 | 4.99656 | 57,797.7 |
| Vendor | 0.91479 | 34.0297 | 15.6094 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,987.7 | 23,987.7 | 0.94600 | 3.43236 | 1.12506 | 25,035.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 23.9374 | 18.0940 | 201.119 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,867.9 | 40,867.9 | 1.27523 | 1.90859 | 59.4829 | 41,528.0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.69549 | 23.7587 | 10.9602 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 17,122.1 | 17,122.1 | 0.67572 | 2.43065 | 13.3875 | 17,876.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.36858 | 3.30216 | 36.7042 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,766.14 | 6,766.14 | 0.21113 | 0.31599 | 9.84807 | 6,875.43 |
| Vendor | 0.12693 | 4.33596 | 2.00024 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,834.76 | 2,834.76 | 0.11187 | 0.40242 | 2.21645 | 2,959.70 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.20. Building Construction (2030)

### 3.20.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.9173 | 18.7042 | 291.179 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,359.2 | 59,359.2 | 1.38858 | 2.47365 | 175.148 | 60,306.2 |
| Vendor | 0.97369 | 30.9855 | 14.4581 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,224.8 | 23,224.8 | 0.76841 | 3.40291 | 38.0945 | 24,296.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.7189 | 25.5300 | 276.456 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,977.0 | 55,977.0 | 1.98368 | 2.67202 | 4.53989 | 56,827.4 |
| Vendor | 0.91479 | 32.7579 | 14.9588 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,254.4 | 23,254.4 | 0.76841 | 3.40291 | 0.99046 | 24,288.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.9456 | 16.4688 | 187.759 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,172.5 | 40,172.5 | 1.13353 | 1.76690 | 54.1103 | 40,781.5 |
| Vendor | 0.69549 | 22.8713 | 10.4955 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 16,598.0 | 16,598.0 | 0.54886 | 2.43065 | 11.7730 | 17,347.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.18756 | 3.00556 | 34.2659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,651.02 | 6,651.02 | 0.18767 | 0.29253 | 8.95857 | 6,751.84 |
| Vendor | 0.12693 | 4.17402 | 1.91543 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,747.99 | 2,747.99 | 0.09087 | 0.40242 | 1.94916 | 2,872.14 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.20.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.9173 | 18.7042 | 291.179 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 59,359.2 | 59,359.2 | 1.38858 | 2.47365 | 175.148 | 60,306.2 |
| Vendor | 0.97369 | 30.9855 | 14.4581 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,224.8 | 23,224.8 | 0.76841 | 3.40291 | 38.0945 | 24,296.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 32.7189 | 25.5300 | 276.456 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,977.0 | 55,977.0 | 1.98368 | 2.67202 | 4.53989 | 56,827.4 |
| Vendor | 0.91479 | 32.7579 | 14.9588 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.35519 | 1.86690 | 2.22209 | — | 23,254.4 | 23,254.4 | 0.76841 | 3.40291 | 0.99046 | 24,288.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 22.9456 | 16.4688 | 187.759 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 40,172.5 | 40,172.5 | 1.13353 | 1.76690 | 54.1103 | 40,781.5 |
| Vendor | 0.69549 | 22.8713 | 10.4955 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.25371 | 1.31548 | 1.56919 | — | 16,598.0 | 16,598.0 | 0.54886 | 2.43065 | 11.7730 | 17,347.9 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.18756 | 3.00556 | 34.2659 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,651.02 | 6,651.02 | 0.18767 | 0.29253 | 8.95857 | 6,751.84 |
| Vendor | 0.12693 | 4.17402 | 1.91543 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.04630 | 0.24008 | 0.28638 | — | 2,747.99 | 2,747.99 | 0.09087 | 0.40242 | 1.94916 | 2,872.14 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.21. Building Construction (2031)

### 3.21.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.5287 | 16.4289 | 271.985 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 58,393.3 | 58,393.3 | 1.38858 | 2.47365 | 158.762 | 59,323.9 |
| Vendor | 0.79609 | 29.7137 | 13.8369 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,477.9 | 22,477.9 | 0.76841 | 3.22531 | 33.0152 | 23,491.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 30.9336 | 23.4531 | 256.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,068.7 | 55,068.7 | 1.78532 | 2.67202 | 4.11008 | 55,913.7 |
| Vendor | 0.73719 | 31.5156 | 14.3376 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,508.2 | 22,508.2 | 0.76841 | 3.22531 | 0.85840 | 23,489.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.8120 | 14.9853 | 175.882 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 39,521.1 | 39,521.1 | 1.13353 | 1.76690 | 48.9295 | 40,124.9 |
| Vendor | 0.54760 | 21.9629 | 10.0518 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.12685 | 1.31548 | 1.44234 | — | 16,064.7 | 16,064.7 | 0.54886 | 2.30379 | 10.2130 | 16,775.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.98069 | 2.73482 | 32.0985 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,543.17 | 6,543.17 | 0.18767 | 0.29253 | 8.10084 | 6,643.14 |
| Vendor | 0.09994 | 4.00823 | 1.83446 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.02315 | 0.24008 | 0.26323 | — | 2,659.70 | 2,659.70 | 0.09087 | 0.38142 | 1.69087 | 2,777.33 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.21.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 31.5287 | 16.4289 | 271.985 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 58,393.3 | 58,393.3 | 1.38858 | 2.47365 | 158.762 | 59,323.9 |
| Vendor | 0.79609 | 29.7137 | 13.8369 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,477.9 | 22,477.9 | 0.76841 | 3.22531 | 33.0152 | 23,491.3 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 30.9336 | 23.4531 | 256.959 | 0.00000 | 0.00000 | 60.2037 | 60.2037 | 0.00000 | 14.1117 | 14.1117 | — | 55,068.7 | 55,068.7 | 1.78532 | 2.67202 | 4.11008 | 55,913.7 |
| Vendor | 0.73719 | 31.5156 | 14.3376 | 0.17760 | 0.35519 | 6.75720 | 7.11239 | 0.17760 | 1.86690 | 2.04449 | — | 22,508.2 | 22,508.2 | 0.76841 | 3.22531 | 0.85840 | 23,489.5 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 21.8120 | 14.9853 | 175.882 | 0.00000 | 0.00000 | 42.2405 | 42.2405 | 0.00000 | 9.88921 | 9.88921 | — | 39,521.1 | 39,521.1 | 1.13353 | 1.76690 | 48.9295 | 40,124.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.54760 | 21.9629 | 10.0518 | 0.12685 | 0.25371 | 4.75451 | 5.00822 | 0.12685 | 1.31548 | 1.44234 | — | 16,064.7 | 16,064.7 | 0.54886 | 2.30379 | 10.2130 | 16,775.2 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.98069 | 2.73482 | 32.0985 | 0.00000 | 0.00000 | 7.70888 | 7.70888 | 0.00000 | 1.80478 | 1.80478 | — | 6,543.17 | 6,543.17 | 0.18767 | 0.29253 | 8.10084 | 6,643.14 |
| Vendor | 0.09994 | 4.00823 | 1.83446 | 0.02315 | 0.04630 | 0.86770 | 0.91400 | 0.02315 | 0.24008 | 0.26323 | — | 2,659.70 | 2,659.70 | 0.09087 | 0.38142 | 1.69087 | 2,777.33 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.22. Paving (2028)

### 3.22.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28697 | 2.77552 | 4.15013 | 0.00584 | 0.10702 | — | 0.10702 | 0.09846 | — | 0.09846 | — | 632.799 | 632.799 | 0.02567 | 0.00513 | — | 634.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05237 | 0.50653 | 0.75740 | 0.00107 | 0.01953 | — | 0.01953 | 0.01797 | — | 0.01797 | — | 104.767 | 104.767 | 0.00425 | 0.00085 | — | 105.127 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02437 | 0.01927 | 0.20963 | 0.00000 | 0.00000 | 0.04129 | 0.04129 | 0.00000 | 0.00967 | 0.00967 | — | 40.6603 | 40.6603 | 0.00125 | 0.00187 | 0.06358 | 41.3109 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00445 | 0.00352 | 0.03826 | 0.00000 | 0.00000 | 0.00753 | 0.00753 | 0.00000 | 0.00176 | 0.00176 | — | 6.73177 | 6.73177 | 0.00021 | 0.00031 | 0.01053 | 6.83949 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.28697 | 2.77552 | 4.15013 | 0.00584 | 0.10702 | — | 0.10702 | 0.09846 | — | 0.09846 | — | 632.799 | 632.799 | 0.02567 | 0.00513 | — | 634.971 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05237 | 0.50653 | 0.75740 | 0.00107 | 0.01953 | — | 0.01953 | 0.01797 | — | 0.01797 | — | 104.767 | 104.767 | 0.00425 | 0.00085 | — | 105.127 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.22.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02437 | 0.01927 | 0.20963 | 0.00000 | 0.00000 | 0.04129 | 0.04129 | 0.00000 | 0.00967 | 0.00967 | — | 40.6603 | 40.6603 | 0.00125 | 0.00187 | 0.06358 | 41.3109 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00445 | 0.00352 | 0.03826 | 0.00000 | 0.00000 | 0.00753 | 0.00753 | 0.00000 | 0.00176 | 0.00176 | — | 6.73177 | 6.73177 | 0.00021 | 0.00031 | 0.01053 | 6.83949 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.23. Paving (2029)

## 3.23.1. Onsite - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.48044 | 4.61298 | 7.08458 | 0.00996 | 0.17074 | — | 0.17074 | 0.15709 | — | 0.15709 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08768 | 0.84187 | 1.29294 | 0.00182 | 0.03116 | — | 0.03116 | 0.02867 | — | 0.02867 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03991 | 0.03016 | 0.33528 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 68.1295 | 68.1295 | 0.00213 | 0.00318 | 0.09916 | 69.2299 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00728 | 0.00550 | 0.06119 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.2796 | 11.2796 | 0.00035 | 0.00053 | 0.01642 | 11.4618 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.48044 | 4.61298 | 7.08458 | 0.00996 | 0.17074 | — | 0.17074 | 0.15709 | — | 0.15709 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08768 | 0.84187 | 1.29294 | 0.00182 | 0.03116 | — | 0.03116 | 0.02867 | — | 0.02867 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.23.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03991 | 0.03016 | 0.33528 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 68.1295 | 68.1295 | 0.00213 | 0.00318 | 0.09916 | 69.2299 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00728 | 0.00550 | 0.06119 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.2796 | 11.2796 | 0.00035 | 0.00053 | 0.01642 | 11.4618 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.24. Paving (2030)

### 3.24.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.46008 | 4.48585 | 7.06831 | 0.00996 | 0.15740 | — | 0.15740 | 0.14480 | — | 0.14480 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08396 | 0.81867 | 1.28997 | 0.00182 | 0.02872 | — | 0.02872 | 0.02643 | — | 0.02643 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.05488 | 0.03118 | 0.48541 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 98.9558 | 98.9558 | 0.00231 | 0.00412 | 0.29198 | 100.535 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05454 | 0.04256 | 0.46087 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 93.3175 | 93.3175 | 0.00331 | 0.00445 | 0.00757 | 94.7351 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03825 | 0.02745 | 0.31301 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 66.9703 | 66.9703 | 0.00189 | 0.00295 | 0.09021 | 67.9855 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00698 | 0.00501 | 0.05712 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.0877 | 11.0877 | 0.00031 | 0.00049 | 0.01493 | 11.2558 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.64411 | 6.28020 | 9.89564 | 0.01395 | 0.22035 | — | 0.22035 | 0.20272 | — | 0.20272 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.46008 | 4.48585 | 7.06831 | 0.00996 | 0.15740 | — | 0.15740 | 0.14480 | — | 0.14480 | — | 1,079.02 | 1,079.02 | 0.04377 | 0.00875 | — | 1,082.72 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08396 | 0.81867 | 1.28997 | 0.00182 | 0.02872 | — | 0.02872 | 0.02643 | — | 0.02643 | — | 178.644 | 178.644 | 0.00725 | 0.00145 | — | 179.257 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.24.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05488 | 0.03118 | 0.48541 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 98.9558 | 98.9558 | 0.00231 | 0.00412 | 0.29198 | 100.535 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05454 | 0.04256 | 0.46087 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 93.3175 | 93.3175 | 0.00331 | 0.00445 | 0.00757 | 94.7351 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03825 | 0.02745 | 0.31301 | 0.00000 | 0.00000 | 0.07042 | 0.07042 | 0.00000 | 0.01649 | 0.01649 | — | 66.9703 | 66.9703 | 0.00189 | 0.00295 | 0.09021 | 67.9855 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00698 | 0.00501 | 0.05712 | 0.00000 | 0.00000 | 0.01285 | 0.01285 | 0.00000 | 0.00301 | 0.00301 | — | 11.0877 | 11.0877 | 0.00031 | 0.00049 | 0.01493 | 11.2558 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.25. Paving (2031)

### 3.25.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.35371 | 3.45229 | 5.57025 | 0.00786 | 0.11825 | — | 0.11825 | 0.10879 | — | 0.10879 | — | 851.392 | 851.392 | 0.03454 | 0.00691 | — | 854.313 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06455 | 0.63004 | 1.01657 | 0.00143 | 0.02158 | — | 0.02158 | 0.01985 | — | 0.01985 | — | 140.958 | 140.958 | 0.00572 | 0.00114 | — | 141.441 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05256 | 0.02739 | 0.45342 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 97.3455 | 97.3455 | 0.00231 | 0.00412 | 0.26467 | 98.8969 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05157 | 0.03910 | 0.42837 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 91.8032 | 91.8032 | 0.00298 | 0.00445 | 0.00685 | 93.2119 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02869 | 0.01971 | 0.23135 | 0.00000 | 0.00000 | 0.05556 | 0.05556 | 0.00000 | 0.01301 | 0.01301 | — | 51.9854 | 51.9854 | 0.00149 | 0.00232 | 0.06436 | 52.7797 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00524 | 0.00360 | 0.04222 | 0.00000 | 0.00000 | 0.01014 | 0.01014 | 0.00000 | 0.00237 | 0.00237 | — | 8.60678 | 8.60678 | 0.00025 | 0.00038 | 0.01066 | 8.73828 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.62759 | 6.12541 | 9.88333 | 0.01395 | 0.20981 | — | 0.20981 | 0.19303 | — | 0.19303 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.35371 | 3.45229 | 5.57025 | 0.00786 | 0.11825 | — | 0.11825 | 0.10879 | — | 0.10879 | — | 851.392 | 851.392 | 0.03454 | 0.00691 | — | 854.313 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06455 | 0.63004 | 1.01657 | 0.00143 | 0.02158 | — | 0.02158 | 0.01985 | — | 0.01985 | — | 140.958 | 140.958 | 0.00572 | 0.00114 | — | 141.441 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.25.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05256 | 0.02739 | 0.45342 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 97.3455 | 97.3455 | 0.00231 | 0.00412 | 0.26467 | 98.8969 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05157 | 0.03910 | 0.42837 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 91.8032 | 91.8032 | 0.00298 | 0.00445 | 0.00685 | 93.2119 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02869 | 0.01971 | 0.23135 | 0.00000 | 0.00000 | 0.05556 | 0.05556 | 0.00000 | 0.01301 | 0.01301 | — | 51.9854 | 51.9854 | 0.00149 | 0.00232 | 0.06436 | 52.7797 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00524 | 0.00360 | 0.04222 | 0.00000 | 0.00000 | 0.01014 | 0.01014 | 0.00000 | 0.00237 | 0.00237 | — | 8.60678 | 8.60678 | 0.00025 | 0.00038 | 0.01066 | 8.73828 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.26. Architectural Coating (2028)

### 3.26.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04494 | 0.33844 | 0.46834 | 0.00072 | 0.00643 | — | 0.00643 | 0.00592 | — | 0.00592 | — | 55.9152 | 55.9152 | 0.00227 | 0.00045 | — | 56.1070 |
| Architectural Coatings | 167.695 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00820 | 0.06177 | 0.08547 | 0.00013 | 0.00117 | — | 0.00117 | 0.00108 | — | 0.00108 | — | 9.25739 | 9.25739 | 0.00038 | 0.00008 | — | 9.28916 |
| Architectural Coatings | 30.6043 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.25790 | 4.61127 | 66.2892 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,296.6 | 12,296.6 | 0.69310 | 0.49473 | 42.1753 | 12,503.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.09921 | 6.01612 | 63.2093 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,593.3 | 11,593.3 | 0.43641 | 0.53440 | 1.09065 | 11,764.6 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.92321 | 2.31228 | 25.1498 | 0.00000 | 0.00000 | 4.95313 | 4.95313 | 0.00000 | 1.15961 | 1.15961 | — | 4,878.06 | 4,878.06 | 0.14953 | 0.22380 | 7.62748 | 4,956.12 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.53349 | 0.42199 | 4.58985 | 0.00000 | 0.00000 | 0.90395 | 0.90395 | 0.00000 | 0.21163 | 0.21163 | — | 807.619 | 807.619 | 0.02476 | 0.03705 | 1.26282 | 820.542 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10731 | 0.80814 | 1.11833 | 0.00173 | 0.01536 | — | 0.01536 | 0.01413 | — | 0.01413 | — | 133.517 | 133.517 | 0.00542 | 0.00108 | — | 133.975 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04494 | 0.33844 | 0.46834 | 0.00072 | 0.00643 | — | 0.00643 | 0.00592 | — | 0.00592 | — | 55.9152 | 55.9152 | 0.00227 | 0.00045 | — | 56.1070 |
| Architectural Coatings | 167.695 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00820 | 0.06177 | 0.08547 | 0.00013 | 0.00117 | — | 0.00117 | 0.00108 | — | 0.00108 | — | 9.25739 | 9.25739 | 0.00038 | 0.00008 | — | 9.28916 |
| Architectural Coatings | 30.6043 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.26.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.25790 | 4.61127 | 66.2892 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,296.6 | 12,296.6 | 0.69310 | 0.49473 | 42.1753 | 12,503.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.09921 | 6.01612 | 63.2093 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,593.3 | 11,593.3 | 0.43641 | 0.53440 | 1.09065 | 11,764.6 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.92321 | 2.31228 | 25.1498 | 0.00000 | 0.00000 | 4.95313 | 4.95313 | 0.00000 | 1.15961 | 1.15961 | — | 4,878.06 | 4,878.06 | 0.14953 | 0.22380 | 7.62748 | 4,956.12 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.53349 | 0.42199 | 4.58985 | 0.00000 | 0.00000 | 0.90395 | 0.90395 | 0.00000 | 0.21163 | 0.21163 | — | 807.619 | 807.619 | 0.02476 | 0.03705 | 1.26282 | 820.542 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.27. Architectural Coating (2029)

### 3.27.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07311 | 0.56725 | 0.79440 | 0.00123 | 0.00917 | — | 0.00917 | 0.00844 | — | 0.00844 | — | 95.3641 | 95.3641 | 0.00387 | 0.00077 | — | 95.6913 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01334 | 0.10352 | 0.14498 | 0.00022 | 0.00167 | — | 0.00167 | 0.00154 | — | 0.00154 | — | 15.7886 | 15.7886 | 0.00064 | 0.00013 | — | 15.8428 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.94051 | 4.15622 | 62.0350 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,078.8 | 12,078.8 | 0.31739 | 0.49473 | 38.5219 | 12,272.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.74215 | 5.56106 | 58.8547 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,389.4 | 11,389.4 | 0.39674 | 0.53440 | 0.99931 | 11,559.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.78748 | 3.61881 | 40.2237 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,173.57 | 8,173.57 | 0.25505 | 0.38172 | 11.8966 | 8,305.60 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.87372 | 0.66043 | 7.34083 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,353.23 | 1,353.23 | 0.04223 | 0.06320 | 1.96961 | 1,375.09 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07311 | 0.56725 | 0.79440 | 0.00123 | 0.00917 | — | 0.00917 | 0.00844 | — | 0.00844 | — | 95.3641 | 95.3641 | 0.00387 | 0.00077 | — | 95.6913 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01334 | 0.10352 | 0.14498 | 0.00022 | 0.00167 | — | 0.00167 | 0.00154 | — | 0.00154 | — | 15.7886 | 15.7886 | 0.00064 | 0.00013 | — | 15.8428 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.27.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.94051 | 4.15622 | 62.0350 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 12,078.8 | 12,078.8 | 0.31739 | 0.49473 | 38.5219 | 12,272.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.74215 | 5.56106 | 58.8547 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,389.4 | 11,389.4 | 0.39674 | 0.53440 | 0.99931 | 11,559.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.78748 | 3.61881 | 40.2237 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,173.57 | 8,173.57 | 0.25505 | 0.38172 | 11.8966 | 8,305.60 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.87372 | 0.66043 | 7.34083 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,353.23 | 1,353.23 | 0.04223 | 0.06320 | 1.96961 | 1,375.09 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.28. Architectural Coating (2030)

### 3.28.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07028 | 0.56052 | 0.79085 | 0.00123 | 0.00783 | — | 0.00783 | 0.00721 | — | 0.00721 | — | 95.3663 | 95.3663 | 0.00387 | 0.00077 | — | 95.6936 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01283 | 0.10229 | 0.14433 | 0.00022 | 0.00143 | — | 0.00143 | 0.00132 | — | 0.00132 | — | 15.7890 | 15.7890 | 0.00064 | 0.00013 | — | 15.8432 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.58345 | 3.74083 | 58.2358 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,871.8 | 11,871.8 | 0.27772 | 0.49473 | 35.0297 | 12,061.2 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 6.54378 | 5.10600 | 55.2912 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,195.4 | 11,195.4 | 0.39674 | 0.53440 | 0.90798 | 11,365.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.58911 | 3.29377 | 37.5517 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,034.50 | 8,034.50 | 0.22671 | 0.35338 | 10.8221 | 8,156.30 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.83751 | 0.60111 | 6.85319 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,330.20 | 1,330.20 | 0.03753 | 0.05851 | 1.79171 | 1,350.37 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07028 | 0.56052 | 0.79085 | 0.00123 | 0.00783 | — | 0.00783 | 0.00721 | — | 0.00721 | — | 95.3663 | 95.3663 | 0.00387 | 0.00077 | — | 95.6936 |
| Architectural Coatings | 286.021 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01283 | 0.10229 | 0.14433 | 0.00022 | 0.00143 | — | 0.00143 | 0.00132 | — | 0.00132 | — | 15.7890 | 15.7890 | 0.00064 | 0.00013 | — | 15.8432 |
| Architectural Coatings | 52.1989 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.28.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.58345 | 3.74083 | 58.2358 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,871.8 | 11,871.8 | 0.27772 | 0.49473 | 35.0297 | 12,061.2 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 6.54378 | 5.10600 | 55.2912 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,195.4 | 11,195.4 | 0.39674 | 0.53440 | 0.90798 | 11,365.5 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 4.58911 | 3.29377 | 37.5517 | 0.00000 | 0.00000 | 8.44809 | 8.44809 | 0.00000 | 1.97784 | 1.97784 | — | 8,034.50 | 8,034.50 | 0.22671 | 0.35338 | 10.8221 | 8,156.30 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.83751 | 0.60111 | 6.85319 | 0.00000 | 0.00000 | 1.54178 | 1.54178 | 0.00000 | 0.36096 | 0.36096 | — | 1,330.20 | 1,330.20 | 0.03753 | 0.05851 | 1.79171 | 1,350.37 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.29. Architectural Coating (2031)

### 3.29.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05376 | 0.43786 | 0.62191 | 0.00097 | 0.00531 | — | 0.00531 | 0.00489 | — | 0.00489 | — | 75.2506 | 75.2506 | 0.00305 | 0.00061 | — | 75.5089 |
| Architectural Coatings | 225.683 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00981 | 0.07991 | 0.11350 | 0.00018 | 0.00097 | — | 0.00097 | 0.00089 | — | 0.00089 | — | 12.4586 | 12.4586 | 0.00051 | 0.00010 | — | 12.5014 |
| Architectural Coatings | 41.1871 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.30574 | 3.28577 | 54.3970 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,678.7 | 11,678.7 | 0.27772 | 0.49473 | 31.7524 | 11,864.8 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.18671 | 4.69062 | 51.3917 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,013.7 | 11,013.7 | 0.35706 | 0.53440 | 0.82202 | 11,182.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.44212 | 2.36481 | 27.7556 | 0.00000 | 0.00000 | 6.66589 | 6.66589 | 0.00000 | 1.56060 | 1.56060 | — | 6,236.75 | 6,236.75 | 0.17888 | 0.27883 | 7.72148 | 6,332.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.62819 | 0.43158 | 5.06540 | 0.00000 | 0.00000 | 1.21653 | 1.21653 | 0.00000 | 0.28481 | 0.28481 | — | 1,032.57 | 1,032.57 | 0.02962 | 0.04616 | 1.27838 | 1,048.34 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.09539 | 0.77690 | 1.10346 | 0.00173 | 0.00943 | — | 0.00943 | 0.00867 | — | 0.00867 | — | 133.518 | 133.518 | 0.00542 | 0.00108 | — | 133.976 |
| Architectural Coatings | 400.430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05376 | 0.43786 | 0.62191 | 0.00097 | 0.00531 | — | 0.00531 | 0.00489 | — | 0.00489 | — | 75.2506 | 75.2506 | 0.00305 | 0.00061 | — | 75.5089 |
| Architectural Coatings | 225.683 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00981 | 0.07991 | 0.11350 | 0.00018 | 0.00097 | — | 0.00097 | 0.00089 | — | 0.00089 | — | 12.4586 | 12.4586 | 0.00051 | 0.00010 | — | 12.5014 |
| Architectural Coatings | 41.1871 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.29.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.30574 | 3.28577 | 54.3970 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,678.7 | 11,678.7 | 0.27772 | 0.49473 | 31.7524 | 11,864.8 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 6.18671 | 4.69062 | 51.3917 | 0.00000 | 0.00000 | 12.0407 | 12.0407 | 0.00000 | 2.82233 | 2.82233 | — | 11,013.7 | 11,013.7 | 0.35706 | 0.53440 | 0.82202 | 11,182.7 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 3.44212 | 2.36481 | 27.7556 | 0.00000 | 0.00000 | 6.66589 | 6.66589 | 0.00000 | 1.56060 | 1.56060 | — | 6,236.75 | 6,236.75 | 0.17888 | 0.27883 | 7.72148 | 6,332.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.62819 | 0.43158 | 5.06540 | 0.00000 | 0.00000 | 1.21653 | 1.21653 | 0.00000 | 0.28481 | 0.28481 | — | 1,032.57 | 1,032.57 | 0.02962 | 0.04616 | 1.27838 | 1,048.34 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,907.1 | 46,907.1 | 4.00159 | 0.48504 | — | 47,151.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 7,766.01 | 7,766.01 | 0.66251 | 0.08030 | — | 7,806.51 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 7,766.01 | 7,766.01 | 0.66251 | 0.08030 | — | 7,806.51 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 46,917.4 | 46,917.4 | 4.00247 | 0.48515 | — | 47,162.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 7,767.71 | 7,767.71 | 0.66265 | 0.08032 | — | 7,808.21 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Total | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Total | 7.42730 | 126.939 | 54.0167 | 0.81025 | 10.2632 | — | 10.2632 | 10.2632 | — | 10.2632 | — | 161,127 | 161,127 | 14.2597 | 0.30340 | — | 161,574 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 26,676.5 | 26,676.5 | 2.36086 | 0.05023 | — | 26,750.5 |
| Total | 1.35548 | 23.1664 | 9.85805 | 0.14787 | 1.87303 | — | 1.87303 | 1.87303 | — | 1.87303 | — | 26,676.5 | 26,676.5 | 2.36086 | 0.05023 | — | 26,750.5 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 63.7151 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | — | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 51.7355 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 5.18203 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 7.96439 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | — | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 63.7151 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | — | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |
| Total | 375.592 | 6.93004 | 707.480 | 0.03075 | 0.35648 | — | 0.35648 | 0.26963 | — | 0.26963 | 0.00000 | 1,895.64 | 1,895.64 | 0.07923 | 0.01573 | — | 1,902.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 283.482 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 28.3947 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 311.877 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 51.7355 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 5.18203 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 7.96439 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | — | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |
| Total | 64.8819 | 0.86626 | 88.4350 | 0.00384 | 0.04456 | — | 0.04456 | 0.03370 | — | 0.03370 | 0.00000 | 214.962 | 214.962 | 0.00898 | 0.00178 | — | 215.718 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/T | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Total | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/T ownhouse | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,001.16 | 2,995.89 | 3,997.05 | 102.913 | 2.47010 | — | 7,305.97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/T | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |
| Total | — | — | — | — | — | — | — | — | — | — | 165.754 | 496.003 | 661.757 | 17.0385 | 0.40895 | — | 1,209.59 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Total | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Total | — | — | — | — | — | — | — | — | — | — | 4,980.33 | 0.00000 | 4,980.33 | 497.766 | 0.00000 | — | 17,424.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |
| Total | — | — | — | — | — | — | — | — | — | — | 824.550 | 0.00000 | 824.550 | 82.4108 | 0.00000 | — | 2,884.82 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 94.8738 | 94.8738 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 15.7074 | 15.7074 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/2/2023 | 1/26/2026 | 5.00000 | 800.000 | — |
| Site Preparation | Site Preparation | 1/27/2026 | 11/30/2027 | 5.00000 | 480.000 | — |

| | | | | | | |
|---|---|---|---|---|---|---|
| Grading | Grading | 12/1/2025 | 8/30/2030 | 5.00000 | 1,240.00 | — |
| Building Construction | Building Construction | 1/2/2023 | 12/31/2031 | 5.00000 | 2,348.00 | — |
| Paving | Paving | 6/1/2028 | 10/15/2031 | 5.00000 | 880.000 | — |
| Architectural Coating | Architectural Coating | 6/1/2028 | 10/15/2031 | 5.00000 | 880.000 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 99.7734 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 8,997.84 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 1,335.93 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 1,799.57 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 99.7734 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 8,997.84 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 1,335.93 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 1,799.57 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Apply dust suppressants to unpaved roads | 84% | 84% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 26,824,811 | 8,941,604 | 0.00000 | 0.00000 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Ton of Debris) | Material Exported (Ton of Debris) | Acres Graded (acres) | Material Demolished (Ton of Debris) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Site Preparation | 0.00000 | 0.00000 | 135.000 | 0.00000 | 0.00000 |
| Grading | 831,810 | 419,400 | 699.000 | 0.00000 | 0.00000 |
| Paving | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Condo/Townhouse | — | 0% |
| Paving | Condo/Townhouse | — | 0% |
| Paving | Condo/Townhouse | — | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2025 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2026 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2027 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2028 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2029 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2030 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2031 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2023 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2024 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 6,000 | 6,000 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 6,000 | 6,000 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 497 | 497 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 26,824,811 | 8,941,604 | 0.00000 | 0.00000 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 21,249,912 | 386.830 | 0.0330 | 0.0040 | 241,382,999 |
| Condo/Townhouse | 21,249,912 | 386.830 | 0.0330 | 0.0040 | 241,382,999 |
| Condo/Townhouse | 1,760,201 | 386.830 | 0.0330 | 0.0040 | 19,994,558 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 21,253,137 | 386.830 | 0.0330 | 0.0040 | 0.00000 |
| Condo/Townhouse | 21,253,137 | 386.830 | 0.0330 | 0.0040 | 0.00000 |
| Condo/Townhouse | 1,763,426 | 386.830 | 0.0330 | 0.0040 | 0.00000 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 20,778,129 | 0.00000 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 250,842,600 | 0.00000 |
| Condo/Townhouse | 20,778,129 | 0.00000 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 367.501 | 0.00000 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 4,436.74 | 0.00000 |
| Condo/Townhouse | 367.501 | 0.00000 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

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#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 6.75000 | annual days of extreme heat |
| Extreme Precipitation | 4.10000 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 31.3300 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |

| | | | | |
|---|---|---|---|---|
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 0 | 0 | 0 | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 1 | 1 | 1 | 2 |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 13.6154 |
| AQ-PM | 2.92470 |
| AQ-DPM | 26.3846 |
| Drinking Water | 38.7161 |
| Lead Risk Housing | 56.6982 |
| Pesticides | 0.00000 |
| Toxic Releases | 0.53763 |
| Traffic | 27.0500 |
| Effect Indicators | — |
| CleanUp Sites | 82.9787 |
| Groundwater | 87.4813 |
| Haz Waste Facilities/Generators | 30.5890 |
| Impaired Water Bodies | 77.2995 |
| Solid Waste | 59.1753 |
| Sensitive Population | — |
| Asthma | 35.8549 |
| Cardio-vascular | 13.0982 |
| Low Birth Weights | 19.9256 |
| Socioeconomic Factor Indicators | — |
| Education | 24.1205 |
| Housing | 63.9670 |
| Linguistic | 24.7665 |
| Poverty | 26.6709 |
| Unemployment | 37.7147 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 64.9557295 |
| Employed | 60.78532016 |
| Median HI | 46.47760811 |
| Education | — |
| Bachelor's or higher | 81.58603875 |
| High school enrollment | 100 |
| Preschool enrollment | 1.873476197 |
| Transportation | — |
| Auto Access | 57.21801617 |
| Active commuting | 87.89939689 |
| Social | — |
| 2-parent households | 65.78981137 |
| Voting | 70.98678301 |
| Neighborhood | — |
| Alcohol availability | 40.65186706 |
| Park access | 81.35506224 |
| Retail density | 93.41716925 |
| Supermarket access | 64.09598358 |
| Tree canopy | 81.52187861 |
| Housing | — |
| Homeownership | 12.72937251 |
| Housing habitability | 27.37071731 |
| Low-inc homeowner severe housing cost burden | 19.88964455 |
| Low-inc renter severe housing cost burden | 39.67663288 |

| | |
|---|---|
| Uncrowded housing | 84.29359682 |
| Health Outcomes | — |
| Insured adults | 64.90440139 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 75.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 79.6 |
| Cognitively Disabled | 32.0 |
| Physically  Disabled | 36.0 |
| Heart Attack ER Admissions | 94.8 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 84.3 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 4.5 |
| SLR Inundation Area | 47.2 |

| | |
|---|---|
| Children | 88.7 |
| Elderly | 20.2 |
| English Speaking | 64.4 |
| Foreign-born | 44.0 |
| Outdoor Workers | 70.9 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 31.0 |
| Traffic Density | 1.4 |
| Traffic Access | 0.0 |
| Other Indices | — |
| Hardship | 20.0 |
| Other Decision Support | — |
| 2016 Voting | 74.8 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0000 |
| Healthy Places Index Score for Project Location (b) | 67.0000 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | 3CE serves Monterey County for electricity |
| Construction: Construction Phases | Revised to fit in planning years of 2023-2031 |
| Construction: Dust From Material Movement | Based on CalEEMod suggested estimates |
| Construction: On-Road Fugitive Dust | Site are located adjacent to existing roadways and development. Accessible primarily from paved roads. |
| Operations: Vehicle Data | Mobile emissions calculated separately |

## 8.2. Project Characteristics

### 8.2.1. Project Details

| Model Parameter | Default Value | New Value |
|---|---|---|
| Electric Utility | Pacific Gas & Electric Company | Central Coast Community Energy |

## 8.4. Construction

### 8.4.1. Construction Phases

| Phase Type | Phase Name | Model Parameter | Default Value | New Value |
|---|---|---|---|---|
| Grading | Grading | Start Date | 12/1/2027 | 12/1/2025 |
| Grading | Grading | End Date | 9/1/2032 | 8/30/2030 |
| Building Construction | Building Construction | Start Date | 9/2/2032 | 1/2/2023 |
| Building Construction | Building Construction | End Date | 3/14/2080 | 12/31/2031 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Building Construction | Work Days per Phase | 12,400.0 | 2,348.00 |
| Paving | Paving | Start Date | 3/15/2080 | 6/1/2028 |
| Paving | Paving | End Date | 7/30/2083 | 10/15/2031 |
| Architectural Coating | Architectural Coating | Start Date | 7/31/2083 | 6/1/2028 |
| Architectural Coating | Architectural Coating | End Date | 12/14/2086 | 10/15/2031 |

## 8.4.4. Dust from Material Movement

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Site Preparation | Material Imported | Ton of Debris | — | 0.00000 |
| Site Preparation | Material Exported | Ton of Debris | — | 0.00000 |
| Site Preparation | Total Acres Graded | acres | 720.000 | 135.000 |
| Grading | Material Imported | Ton of Debris | — | 831,810 |
| Grading | Material Exported | Ton of Debris | — | 419,400 |
| Grading | Total Acres Graded | acres | 3,720.00 | 699.000 |

## 8.4.7. On-Road Fugitive Dust

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Demolition | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Vendor Trip Paved | % | 52.0000 | 100.0000 |

| | | | | |
|---|---|---|---|---|
| Building Construction | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Hauling Trip Paved | % | 52.0000 | 100.0000 |

## 8.5. Operations

### 8.5.1. Mobile Sources

#### 8.5.1.1. Vehicle Data

| Land Use | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |

# Monterey HEU - Reasonable Capacity Detailed Report

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3.1.2. Offsite - Unmitigated

3.1.3. Onsite - Mitigated

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3.2.3. Onsite - Mitigated

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3.3.2. Offsite - Unmitigated

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Monterey HEU - Reasonable Capacity |
| Construction Start Date | 1/2/2023 |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.80000 |
| Precipitation (days) | 27.6000 |
| Location | Monterey County, CA, USA |
| County | Monterey |
| City | Monterey |
| Air District | Monterey Bay ARD |
| Air Basin | North Central Coast |
| TAZ | 3238 |
| EDFZ | 6 |
| Electric Utility | Central Coast Community Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.43 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 4,434.00 | Dwelling Unit | 277.125 | 4,700,040 | 0.00000 | 0.00000 | 14,721.0 | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Energy | E-15 | Require All-Electric Development |

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 395.064 | 75.0020 | 213.388 | 0.20144 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 394.610 | 87.1156 | 204.653 | 0.20144 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 279.884 | 55.4064 | 140.435 | 0.14389 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 51.0789 | 10.1117 | 25.6293 | 0.02626 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |

## 2.2. Construction Emissions by Year

### 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.9523 | 67.0310 | 213.388 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 39,563.9 | 39,563.9 | 2.12414 | 2.40659 | 135.591 | 40,469.8 |
| 2024 | 21.3236 | 72.9881 | 210.159 | 0.13528 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 40,865.6 | 40,865.6 | 2.10949 | 2.42252 | 128.011 | 41,768.3 |
| 2025 | 20.2076 | 75.0020 | 197.712 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| 2026 | 19.3510 | 70.2130 | 186.424 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 49,134.1 | 49,134.1 | 2.54856 | 3.68984 | 127.120 | 50,424.5 |
| 2027 | 14.6239 | 30.8731 | 144.751 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 33,586.2 | 33,586.2 | 1.67291 | 2.17794 | 100.950 | 34,378.0 |
| 2028 | 14.9688 | 35.7516 | 146.640 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 34,571.7 | 34,571.7 | 1.74000 | 2.18388 | 92.5624 | 35,358.5 |
| 2029 | 395.064 | 33.8927 | 151.426 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 36,744.9 | 36,744.9 | 1.11396 | 2.28110 | 97.4150 | 37,549.9 |
| 2030 | 394.265 | 28.1341 | 143.096 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 36,043.8 | 36,043.8 | 0.96649 | 2.28110 | 88.0884 | 36,835.8 |
| 2031 | 12.3874 | 24.4902 | 114.256 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 31,090.3 | 31,090.3 | 0.86254 | 2.04147 | 68.0435 | 31,788.3 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.0287 | 71.2559 | 204.653 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 38,175.3 | 38,175.3 | 2.32583 | 2.47731 | 3.50986 | 38,975.1 |
| 2024 | 21.0076 | 87.1156 | 203.645 | 0.20143 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| 2025 | 19.9743 | 79.6512 | 190.584 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 48,593.0 | 48,593.0 | 2.88599 | 3.69242 | 3.57123 | 49,769.1 |
| 2026 | 19.0261 | 74.0742 | 179.625 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 47,840.2 | 47,840.2 | 2.75058 | 3.69242 | 3.29341 | 49,012.6 |
| 2027 | 14.3110 | 34.0994 | 138.289 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 32,323.0 | 32,323.0 | 1.88406 | 2.24833 | 2.62414 | 33,042.7 |
| 2028 | 14.6651 | 38.9265 | 141.350 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 33,328.1 | 33,328.1 | 1.28248 | 2.26504 | 2.39537 | 34,037.5 |
| 2029 | 394.610 | 37.0255 | 144.843 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 35,287.4 | 35,287.4 | 1.28287 | 2.37600 | 2.52654 | 36,030.0 |
| 2030 | 394.159 | 31.6692 | 137.005 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 34,614.3 | 34,614.3 | 1.21986 | 2.36555 | 2.28435 | 35,352.0 |
| 2031 | 12.1553 | 27.6217 | 109.103 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 29,921.5 | 29,921.5 | 1.00330 | 2.11185 | 1.76284 | 30,577.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 15.2698 | 49.9075 | 140.435 | 0.08470 | 1.33845 | 16.6986 | 18.0371 | 1.23856 | 3.98103 | 5.21959 | — | 27,265.4 | 27,265.4 | 1.61383 | 1.71429 | 41.6803 | 27,858.3 |
| 2024 | 14.7869 | 54.0800 | 138.210 | 0.10222 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 29,225.5 | 29,225.5 | 1.67283 | 1.88496 | 40.3527 | 29,869.4 |
| 2025 | 14.0762 | 55.4064 | 131.127 | 0.14389 | 1.39101 | 20.8618 | 22.2528 | 1.29576 | 5.43984 | 6.73560 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 12.5877 | 42.0021 | 115.649 | 0.11372 | 0.93728 | 19.3244 | 20.2617 | 0.87509 | 4.90224 | 5.77733 | — | 30,324.7 | 30,324.7 | 1.72945 | 2.27412 | 37.3100 | 31,082.9 |
| 2027 | 10.1793 | 23.5427 | 94.9221 | 0.06172 | 0.33043 | 16.6741 | 17.0045 | 0.31119 | 3.97548 | 4.28668 | — | 23,154.2 | 23,154.2 | 1.29548 | 1.60595 | 31.1588 | 23,696.3 |
| 2028 | 10.1149 | 24.8677 | 93.7076 | 0.06730 | 0.40432 | 16.7579 | 17.1623 | 0.37920 | 3.99532 | 4.37451 | — | 23,408.1 | 23,408.1 | 0.79614 | 1.61682 | 28.5838 | 23,938.4 |
| 2029 | 84.4330 | 24.8448 | 93.9562 | 0.06926 | 0.41292 | 17.5462 | 17.9591 | 0.38708 | 4.17967 | 4.56675 | — | 23,937.5 | 23,937.5 | 0.82070 | 1.59942 | 27.0829 | 24,461.8 |
| 2030 | 279.884 | 21.6720 | 93.5820 | 0.06295 | 0.28361 | 19.6551 | 19.9387 | 0.26812 | 4.67338 | 4.94150 | — | 24,784.4 | 24,784.4 | 0.75021 | 1.62866 | 27.1944 | 25,315.7 |
| 2031 | 8.58930 | 18.9084 | 75.1455 | 0.06172 | 0.26375 | 16.6741 | 16.9378 | 0.20485 | 3.97548 | 4.18033 | — | 21,434.2 | 21,434.2 | 0.66637 | 1.45819 | 20.9840 | 21,906.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.78674 | 9.10811 | 25.6293 | 0.01546 | 0.24427 | 3.04750 | 3.29176 | 0.22604 | 0.72654 | 0.95257 | — | 4,514.10 | 4,514.10 | 0.26719 | 0.28382 | 6.90065 | 4,612.26 |
| 2024 | 2.69861 | 9.86960 | 25.2233 | 0.01866 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 4,838.62 | 4,838.62 | 0.27696 | 0.31208 | 6.68085 | 4,945.23 |
| 2025 | 2.56890 | 10.1117 | 23.9307 | 0.02626 | 0.25386 | 3.80728 | 4.06114 | 0.23648 | 0.99277 | 1.22925 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |
| 2026 | 2.29725 | 7.66538 | 21.1059 | 0.02075 | 0.17105 | 3.52670 | 3.69776 | 0.15970 | 0.89466 | 1.05436 | — | 5,020.60 | 5,020.60 | 0.28633 | 0.37651 | 6.17710 | 5,146.13 |
| 2027 | 1.85773 | 4.29655 | 17.3233 | 0.01126 | 0.06030 | 3.04302 | 3.10332 | 0.05679 | 0.72553 | 0.78232 | — | 3,833.45 | 3,833.45 | 0.21448 | 0.26588 | 5.15869 | 3,923.20 |
| 2028 | 1.84596 | 4.53835 | 17.1016 | 0.01228 | 0.07379 | 3.05832 | 3.13211 | 0.06920 | 0.72915 | 0.79835 | — | 3,875.48 | 3,875.48 | 0.13181 | 0.26768 | 4.73237 | 3,963.27 |
| 2029 | 15.4090 | 4.53418 | 17.1470 | 0.01264 | 0.07536 | 3.20218 | 3.27754 | 0.07064 | 0.76279 | 0.83343 | — | 3,963.13 | 3,963.13 | 0.13588 | 0.26480 | 4.48389 | 4,049.93 |
| 2030 | 51.0789 | 3.95515 | 17.0787 | 0.01149 | 0.05176 | 3.58705 | 3.63881 | 0.04893 | 0.85289 | 0.90182 | — | 4,103.34 | 4,103.34 | 0.12421 | 0.26964 | 4.50234 | 4,191.30 |
| 2031 | 1.56755 | 3.45078 | 13.7141 | 0.01126 | 0.04814 | 3.04302 | 3.09115 | 0.03738 | 0.72553 | 0.76291 | — | 3,548.67 | 3,548.67 | 0.11033 | 0.24142 | 3.47415 | 3,626.85 |

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.07227 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 7,693.37 | 7,693.37 | 0.31208 | 0.06242 | 0.00000 | 7,719.77 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.08431 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 3.33632 | 32.3010 | 31.3632 | 0.05116 | 1.42237 | 4.18014 | 5.60251 | 1.30858 | 2.10009 | 3.40867 | — | 5,434.04 | 5,434.04 | 0.22043 | 0.04409 | 0.00000 | 5,452.69 |
| 2025 | 3.08834 | 28.6589 | 29.5358 | 0.06024 | 1.19058 | 2.60408 | 3.79466 | 1.09534 | 1.02392 | 2.11926 | — | 6,426.10 | 6,426.10 | 0.26067 | 0.05213 | 0.00000 | 6,448.15 |
| 2026 | 2.14106 | 19.3459 | 21.7251 | 0.04426 | 0.77739 | 1.64806 | 2.42545 | 0.71520 | 0.64802 | 1.36322 | — | 4,695.23 | 4,695.23 | 0.19046 | 0.03809 | 0.00000 | 4,711.35 |
| 2027 | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | 0.00000 | 0.24041 | 0.22118 | 0.00000 | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | 0.00000 | 1,718.07 |
| 2028 | 0.97562 | 8.96044 | 13.1046 | 0.02217 | 0.31406 | 0.00000 | 0.31406 | 0.28893 | 0.00000 | 0.28893 | — | 2,302.65 | 2,302.65 | 0.09341 | 0.01868 | 0.00000 | 2,310.55 |
| 2029 | 75.1989 | 9.62168 | 14.5570 | 0.02426 | 0.32290 | 0.00000 | 0.32290 | 0.29707 | 0.00000 | 0.29707 | — | 2,518.59 | 2,518.59 | 0.10217 | 0.02043 | 0.00000 | 2,527.23 |
| 2030 | 269.877 | 6.55171 | 9.98991 | 0.01794 | 0.19359 | 0.00000 | 0.19359 | 0.17810 | 0.00000 | 0.17810 | — | 1,806.87 | 1,806.87 | 0.07329 | 0.01466 | 0.00000 | 1,813.07 |
| 2031 | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | 0.00000 | 0.17374 | 0.15984 | 0.00000 | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | 0.00000 | 1,717.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |
| 2024 | 0.60888 | 5.89493 | 5.72379 | 0.00934 | 0.25958 | 0.76288 | 1.02246 | 0.23882 | 0.38327 | 0.62208 | — | 899.668 | 899.668 | 0.03649 | 0.00730 | 0.00000 | 902.755 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 0.56362 | 5.23025 | 5.39028 | 0.01099 | 0.21728 | 0.47524 | 0.69253 | 0.19990 | 0.18687 | 0.38676 | — | 1,063.91 | 1,063.91 | 0.04316 | 0.00863 | 0.00000 | 1,067.57 |
| 2026 | 0.39074 | 3.53062 | 3.96484 | 0.00808 | 0.14187 | 0.30077 | 0.44264 | 0.13052 | 0.11826 | 0.24879 | — | 777.349 | 777.349 | 0.03153 | 0.00631 | 0.00000 | 780.017 |
| 2027 | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | 0.00000 | 0.04387 | 0.04036 | 0.00000 | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | 0.00000 | 284.447 |
| 2028 | 0.17805 | 1.63528 | 2.39159 | 0.00405 | 0.05732 | 0.00000 | 0.05732 | 0.05273 | 0.00000 | 0.05273 | — | 381.230 | 381.230 | 0.01546 | 0.00309 | 0.00000 | 382.538 |
| 2029 | 13.7238 | 1.75596 | 2.65665 | 0.00443 | 0.05893 | 0.00000 | 0.05893 | 0.05421 | 0.00000 | 0.05421 | — | 416.981 | 416.981 | 0.01691 | 0.00338 | 0.00000 | 418.412 |
| 2030 | 49.2525 | 1.19569 | 1.82316 | 0.00327 | 0.03533 | 0.00000 | 0.03533 | 0.03250 | 0.00000 | 0.03250 | — | 299.148 | 299.148 | 0.01213 | 0.00243 | 0.00000 | 300.174 |
| 2031 | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | 0.00000 | 0.03171 | 0.02917 | 0.00000 | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | 0.00000 | 284.418 |

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 17.8504 | 27.8740 | 176.729 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 33,741.4 | 33,741.4 | 1.88795 | 2.35936 | 135.591 | 34,627.3 |
| 2024 | 16.4755 | 25.8142 | 164.118 | 0.06301 | 0.12602 | 23.8752 | 24.0012 | 0.12602 | 5.69672 | 5.82274 | — | 33,172.3 | 33,172.3 | 1.79741 | 2.36010 | 128.011 | 34,048.5 |
| 2025 | 15.8839 | 34.8796 | 156.362 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,920.1 | 40,920.1 | 2.23776 | 3.61944 | 137.406 | 42,192.0 |
| 2026 | 15.2360 | 33.1337 | 145.887 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,138.3 | 40,138.3 | 2.18365 | 3.61686 | 127.120 | 41,397.9 |
| 2027 | 13.5940 | 21.4822 | 131.813 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 31,189.1 | 31,189.1 | 1.57567 | 2.15850 | 100.950 | 31,972.7 |
| 2028 | 13.2921 | 20.1991 | 123.795 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 30,663.2 | 30,663.2 | 1.58145 | 2.15217 | 92.5624 | 31,436.6 |
| 2029 | 15.1311 | 20.2929 | 137.412 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 34,214.5 | 34,214.5 | 1.01132 | 2.26057 | 97.4150 | 35,010.9 |
| 2030 | 14.3605 | 18.9574 | 129.104 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 33,513.4 | 33,513.4 | 0.86385 | 2.26057 | 88.0884 | 34,296.8 |
| 2031 | 11.4690 | 16.3716 | 101.411 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 28,693.5 | 28,693.5 | 0.76531 | 2.02202 | 68.0435 | 29,383.2 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 16.9268 | 32.0989 | 167.993 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 32,352.7 | 32,352.7 | 2.08964 | 2.43007 | 3.50986 | 33,132.6 |
| 2024 | 16.2881 | 41.6078 | 160.355 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,351.9 | 40,351.9 | 2.60490 | 3.73397 | 3.77017 | 41,533.5 |
| 2025 | 15.6507 | 39.5287 | 149.234 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 39,596.5 | 39,596.5 | 2.52105 | 3.61944 | 3.57123 | 40,741.7 |
| 2026 | 14.9111 | 36.9950 | 139.088 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 38,844.4 | 38,844.4 | 2.38567 | 3.61944 | 3.29341 | 39,985.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 13.2811 | 24.7084 | 125.351 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 29,925.9 | 29,925.9 | 1.78682 | 2.22888 | 2.62414 | 30,637.4 |
| 2028 | 12.9884 | 23.3740 | 118.504 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 29,419.6 | 29,419.6 | 1.12394 | 2.23333 | 2.39537 | 30,115.6 |
| 2029 | 14.6775 | 23.9125 | 130.830 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,757.0 | 32,757.0 | 1.18023 | 2.35548 | 2.52654 | 33,491.0 |
| 2030 | 14.2552 | 22.4925 | 123.013 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,083.9 | 32,083.9 | 1.11722 | 2.34503 | 2.28435 | 32,812.9 |
| 2031 | 11.2369 | 19.5032 | 96.2573 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 27,524.7 | 27,524.7 | 0.90607 | 2.09240 | 1.76284 | 28,172.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 12.3478 | 22.0148 | 114.321 | 0.04489 | 0.08977 | 16.6986 | 16.7884 | 0.08977 | 3.98103 | 4.07080 | — | 23,117.8 | 23,117.8 | 1.44558 | 1.68064 | 41.6803 | 23,696.5 |
| 2024 | 11.4506 | 21.7790 | 106.847 | 0.05106 | 0.10720 | 17.0304 | 17.1376 | 0.10720 | 4.06980 | 4.17700 | — | 23,791.5 | 23,791.5 | 1.45241 | 1.84087 | 40.3527 | 24,416.7 |
| 2025 | 10.9878 | 26.7475 | 101.591 | 0.08365 | 0.20043 | 18.2577 | 18.4582 | 0.20043 | 4.41592 | 4.61634 | — | 28,351.0 | 28,351.0 | 1.69957 | 2.58531 | 42.5093 | 29,206.4 |
| 2026 | 10.4466 | 22.6562 | 93.9237 | 0.06947 | 0.15989 | 17.6763 | 17.8362 | 0.15989 | 4.25422 | 4.41412 | — | 25,629.4 | 25,629.4 | 1.53899 | 2.23602 | 37.3100 | 26,371.6 |
| 2027 | 9.44370 | 16.8349 | 85.6808 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.09002 | 3.97548 | 4.06550 | — | 21,442.0 | 21,442.0 | 1.22603 | 1.59206 | 31.1588 | 21,978.3 |
| 2028 | 9.13924 | 15.9072 | 80.6030 | 0.04513 | 0.09026 | 16.7579 | 16.8482 | 0.09026 | 3.99532 | 4.08558 | — | 21,105.4 | 21,105.4 | 0.70274 | 1.59814 | 28.5838 | 21,627.8 |
| 2029 | 9.23412 | 15.2231 | 79.3992 | 0.04501 | 0.09002 | 17.5462 | 17.6362 | 0.09002 | 4.17967 | 4.26968 | — | 21,419.0 | 21,419.0 | 0.71853 | 1.57899 | 27.0829 | 21,934.5 |
| 2030 | 10.0073 | 15.1203 | 83.5921 | 0.04501 | 0.09002 | 19.6551 | 19.7451 | 0.09002 | 4.67338 | 4.76340 | — | 22,977.5 | 22,977.5 | 0.67692 | 1.61400 | 27.1944 | 23,502.6 |
| 2031 | 7.93331 | 13.1094 | 65.9703 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.04501 | 3.97548 | 4.02049 | — | 19,722.1 | 19,722.1 | 0.59692 | 1.44430 | 20.9840 | 20,188.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.25348 | 4.01770 | 20.8635 | 0.00819 | 0.01638 | 3.04750 | 3.06388 | 0.01638 | 0.72654 | 0.74292 | — | 3,827.42 | 3,827.42 | 0.23933 | 0.27825 | 6.90065 | 3,923.22 |
| 2024 | 2.08973 | 3.97467 | 19.4995 | 0.00932 | 0.01956 | 3.10805 | 3.12762 | 0.01956 | 0.74274 | 0.76230 | — | 3,938.96 | 3,938.96 | 0.24046 | 0.30478 | 6.68085 | 4,042.47 |
| 2025 | 2.00528 | 4.88142 | 18.5404 | 0.01527 | 0.03658 | 3.33204 | 3.36862 | 0.03658 | 0.80590 | 0.84248 | — | 4,693.83 | 4,693.83 | 0.28138 | 0.42803 | 7.03790 | 4,835.46 |
| 2026 | 1.90650 | 4.13475 | 17.1411 | 0.01268 | 0.02918 | 3.22593 | 3.25511 | 0.02918 | 0.77640 | 0.80558 | — | 4,243.25 | 4,243.25 | 0.25480 | 0.37020 | 6.17710 | 4,366.11 |
| 2027 | 1.72348 | 3.07237 | 15.6367 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.01643 | 0.72553 | 0.74195 | — | 3,549.97 | 3,549.97 | 0.20298 | 0.26358 | 5.15869 | 3,638.75 |
| 2028 | 1.66791 | 2.90307 | 14.7100 | 0.00824 | 0.01647 | 3.05832 | 3.07480 | 0.01647 | 0.72915 | 0.74562 | — | 3,494.25 | 3,494.25 | 0.11635 | 0.26459 | 4.73237 | 3,580.73 |
| 2029 | 1.68523 | 2.77822 | 14.4904 | 0.00821 | 0.01643 | 3.20218 | 3.21861 | 0.01643 | 0.76279 | 0.77922 | — | 3,546.15 | 3,546.15 | 0.11896 | 0.26142 | 4.48389 | 3,631.51 |
| 2030 | 1.82633 | 2.75946 | 15.2556 | 0.00821 | 0.01643 | 3.58705 | 3.60348 | 0.01643 | 0.85289 | 0.86932 | — | 3,804.19 | 3,804.19 | 0.11207 | 0.26722 | 4.50234 | 3,891.13 |
| 2031 | 1.44783 | 2.39247 | 12.0396 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.00821 | 0.72553 | 0.73374 | — | 3,265.23 | 3,265.23 | 0.09883 | 0.23912 | 3.47415 | 3,342.43 |

## 2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.9523 | 67.0310 | 213.388 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 39,563.9 | 39,563.9 | 2.12414 | 2.40659 | 135.591 | 40,469.8 |
| 2024 | 21.3236 | 72.9881 | 210.159 | 0.13528 | 2.22345 | 31.5414 | 33.7649 | 2.05566 | 9.63667 | 11.6923 | — | 40,865.6 | 40,865.6 | 2.10949 | 2.42252 | 128.011 | 41,768.3 |
| 2025 | 20.2076 | 75.0020 | 197.712 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 49,916.6 | 49,916.6 | 2.60269 | 3.69242 | 137.406 | 51,219.5 |
| 2026 | 19.3510 | 70.2130 | 186.424 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 49,134.1 | 49,134.1 | 2.54856 | 3.68984 | 127.120 | 50,424.5 |
| 2027 | 14.6239 | 30.8731 | 144.751 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 33,586.2 | 33,586.2 | 1.67291 | 2.17794 | 100.950 | 34,378.0 |
| 2028 | 14.9688 | 35.7516 | 146.640 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 34,571.7 | 34,571.7 | 1.74000 | 2.18388 | 92.5624 | 35,358.5 |
| 2029 | 395.064 | 33.8927 | 151.426 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 36,744.9 | 36,744.9 | 1.11396 | 2.28110 | 97.4150 | 37,549.9 |
| 2030 | 394.265 | 28.1341 | 143.096 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 36,043.8 | 36,043.8 | 0.96649 | 2.28110 | 88.0884 | 36,835.8 |
| 2031 | 12.3874 | 24.4902 | 114.256 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 31,090.3 | 31,090.3 | 0.86254 | 2.04147 | 68.0435 | 31,788.3 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 21.0287 | 71.2559 | 204.653 | 0.11891 | 1.87898 | 23.8584 | 25.7374 | 1.73875 | 5.69280 | 7.43154 | — | 38,175.3 | 38,175.3 | 2.32583 | 2.47731 | 3.50986 | 38,975.1 |
| 2024 | 21.0076 | 87.1156 | 203.645 | 0.20143 | 2.22642 | 31.5414 | 33.7649 | 2.07075 | 9.63667 | 11.6923 | — | 49,347.7 | 49,347.7 | 2.96981 | 3.80696 | 3.77017 | 50,560.2 |
| 2025 | 19.9743 | 79.6512 | 190.584 | 0.20144 | 1.94741 | 29.6526 | 31.6000 | 1.81407 | 7.72728 | 9.54135 | — | 48,593.0 | 48,593.0 | 2.88599 | 3.69242 | 3.57123 | 49,769.1 |
| 2026 | 19.0261 | 74.0742 | 179.625 | 0.20144 | 1.78063 | 29.6526 | 31.4332 | 1.66062 | 7.72728 | 9.38791 | — | 47,840.2 | 47,840.2 | 2.75058 | 3.69242 | 3.29341 | 49,012.6 |
| 2027 | 14.3110 | 34.0994 | 138.289 | 0.08641 | 0.46260 | 23.7581 | 24.2207 | 0.43567 | 5.66927 | 6.10495 | — | 32,323.0 | 32,323.0 | 1.88406 | 2.24833 | 2.62414 | 33,042.7 |
| 2028 | 14.6651 | 38.9265 | 141.350 | 0.10037 | 0.68180 | 23.8584 | 24.5402 | 0.63734 | 5.69280 | 6.33014 | — | 33,328.1 | 33,328.1 | 1.28248 | 2.26504 | 2.39537 | 34,037.5 |
| 2029 | 394.610 | 37.0255 | 144.843 | 0.10036 | 0.64071 | 28.0302 | 28.4447 | 0.59953 | 6.67065 | 7.06208 | — | 35,287.4 | 35,287.4 | 1.28287 | 2.37600 | 2.52654 | 36,030.0 |
| 2030 | 394.159 | 31.6692 | 137.005 | 0.08813 | 0.39711 | 28.0302 | 28.4273 | 0.37542 | 6.67065 | 7.04607 | — | 34,614.3 | 34,614.3 | 1.21986 | 2.36555 | 2.28435 | 35,352.0 |
| 2031 | 12.1553 | 27.6217 | 109.103 | 0.08641 | 0.36926 | 23.7581 | 24.1273 | 0.28679 | 5.66927 | 5.95606 | — | 29,921.5 | 29,921.5 | 1.00330 | 2.11185 | 1.76284 | 30,577.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 15.2698 | 49.9075 | 140.435 | 0.08470 | 1.33845 | 16.6986 | 18.0371 | 1.23856 | 3.98103 | 5.21959 | — | 27,265.4 | 27,265.4 | 1.61383 | 1.71429 | 41.6803 | 27,858.3 |
| 2024 | 14.7869 | 54.0800 | 138.210 | 0.10222 | 1.52958 | 21.2106 | 22.7402 | 1.41579 | 6.16989 | 7.58567 | — | 29,225.5 | 29,225.5 | 1.67283 | 1.88496 | 40.3527 | 29,869.4 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 14.0762 | 55.4064 | 131.127 | 0.14389 | 1.39101 | 20.8618 | 22.2528 | 1.29576 | 5.43984 | 6.73560 | — | 34,777.1 | 34,777.1 | 1.96024 | 2.63745 | 42.5093 | 35,654.6 |
| 2026 | 12.5877 | 42.0021 | 115.649 | 0.11372 | 0.93728 | 19.3244 | 20.2617 | 0.87509 | 4.90224 | 5.77733 | — | 30,324.7 | 30,324.7 | 1.72945 | 2.27412 | 37.3100 | 31,082.9 |
| 2027 | 10.1793 | 23.5427 | 94.9221 | 0.06172 | 0.33043 | 16.6741 | 17.0045 | 0.31119 | 3.97548 | 4.28668 | — | 23,154.2 | 23,154.2 | 1.29548 | 1.60595 | 31.1588 | 23,696.3 |
| 2028 | 10.1149 | 24.8677 | 93.7076 | 0.06730 | 0.40432 | 16.7579 | 17.1623 | 0.37920 | 3.99532 | 4.37451 | — | 23,408.1 | 23,408.1 | 0.79614 | 1.61682 | 28.5838 | 23,938.4 |
| 2029 | 84.4330 | 24.8448 | 93.9562 | 0.06926 | 0.41292 | 17.5462 | 17.9591 | 0.38708 | 4.17967 | 4.56675 | — | 23,937.5 | 23,937.5 | 0.82070 | 1.59942 | 27.0829 | 24,461.8 |
| 2030 | 279.884 | 21.6720 | 93.5820 | 0.06295 | 0.28361 | 19.6551 | 19.9387 | 0.26812 | 4.67338 | 4.94150 | — | 24,784.4 | 24,784.4 | 0.75021 | 1.62866 | 27.1944 | 25,315.7 |
| 2031 | 8.58930 | 18.9084 | 75.1455 | 0.06172 | 0.26375 | 16.6741 | 16.9378 | 0.20485 | 3.97548 | 4.18033 | — | 21,434.2 | 21,434.2 | 0.66637 | 1.45819 | 20.9840 | 21,906.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.78674 | 9.10811 | 25.6293 | 0.01546 | 0.24427 | 3.04750 | 3.29176 | 0.22604 | 0.72654 | 0.95257 | — | 4,514.10 | 4,514.10 | 0.26719 | 0.28382 | 6.90065 | 4,612.26 |
| 2024 | 2.69861 | 9.86960 | 25.2233 | 0.01866 | 0.27915 | 3.87093 | 4.15008 | 0.25838 | 1.12600 | 1.38439 | — | 4,838.62 | 4,838.62 | 0.27696 | 0.31208 | 6.68085 | 4,945.23 |
| 2025 | 2.56890 | 10.1117 | 23.9307 | 0.02626 | 0.25386 | 3.80728 | 4.06114 | 0.23648 | 0.99277 | 1.22925 | — | 5,757.75 | 5,757.75 | 0.32454 | 0.43666 | 7.03790 | 5,903.02 |
| 2026 | 2.29725 | 7.66538 | 21.1059 | 0.02075 | 0.17105 | 3.52670 | 3.69776 | 0.15970 | 0.89466 | 1.05436 | — | 5,020.60 | 5,020.60 | 0.28633 | 0.37651 | 6.17710 | 5,146.13 |
| 2027 | 1.85773 | 4.29655 | 17.3233 | 0.01126 | 0.06030 | 3.04302 | 3.10332 | 0.05679 | 0.72553 | 0.78232 | — | 3,833.45 | 3,833.45 | 0.21448 | 0.26588 | 5.15869 | 3,923.20 |
| 2028 | 1.84596 | 4.53835 | 17.1016 | 0.01228 | 0.07379 | 3.05832 | 3.13211 | 0.06920 | 0.72915 | 0.79835 | — | 3,875.48 | 3,875.48 | 0.13181 | 0.26768 | 4.73237 | 3,963.27 |
| 2029 | 15.4090 | 4.53418 | 17.1470 | 0.01264 | 0.07536 | 3.20218 | 3.27754 | 0.07064 | 0.76279 | 0.83343 | — | 3,963.13 | 3,963.13 | 0.13588 | 0.26480 | 4.48389 | 4,049.93 |
| 2030 | 51.0789 | 3.95515 | 17.0787 | 0.01149 | 0.05176 | 3.58705 | 3.63881 | 0.04893 | 0.85289 | 0.90182 | — | 4,103.34 | 4,103.34 | 0.12421 | 0.26964 | 4.50234 | 4,191.30 |
| 2031 | 1.56755 | 3.45078 | 13.7141 | 0.01126 | 0.04814 | 3.04302 | 3.09115 | 0.03738 | 0.72553 | 0.76291 | — | 3,548.67 | 3,548.67 | 0.11033 | 0.24142 | 3.47415 | 3,626.85 |

### 2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.07227 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 7,693.37 | 7,693.37 | 0.31208 | 0.06242 | 0.00000 | 7,719.77 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 4.10196 | 39.1570 | 36.6599 | 0.05590 | 1.75296 | 0.00000 | 1.75296 | 1.61272 | 0.00000 | 1.61272 | — | 5,822.53 | 5,822.53 | 0.23619 | 0.04724 | 0.00000 | 5,842.51 |
| 2024 | 4.84802 | 47.1739 | 46.0415 | 0.08431 | 2.09742 | 7.66623 | 9.76366 | 1.92963 | 3.93995 | 5.86958 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2025 | 4.32367 | 40.1225 | 41.3501 | 0.08433 | 1.66682 | 3.64571 | 5.31253 | 1.53347 | 1.43349 | 2.96696 | — | 8,996.54 | 8,996.54 | 0.36494 | 0.07299 | 0.00000 | 9,027.41 |
| 2026 | 4.11501 | 37.0793 | 40.5370 | 0.08433 | 1.50003 | 3.64571 | 5.14574 | 1.38003 | 1.43349 | 2.81352 | — | 8,995.82 | 8,995.82 | 0.36491 | 0.07298 | 0.00000 | 9,026.69 |
| 2027 | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | 0.00000 | 0.33657 | 0.30965 | 0.00000 | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | 0.00000 | 2,405.30 |
| 2028 | 1.67668 | 15.5525 | 22.8451 | 0.03735 | 0.55578 | 0.00000 | 0.55578 | 0.51132 | 0.00000 | 0.51132 | — | 3,908.49 | 3,908.49 | 0.15855 | 0.03171 | 0.00000 | 3,921.90 |
| 2029 | 379.933 | 15.0398 | 22.8196 | 0.03734 | 0.51468 | 0.00000 | 0.51468 | 0.47351 | 0.00000 | 0.47351 | — | 3,907.46 | 3,907.46 | 0.15850 | 0.03170 | 0.00000 | 3,920.87 |
| 2030 | 379.904 | 9.17669 | 13.9919 | 0.02512 | 0.27109 | 0.00000 | 0.27109 | 0.24940 | 0.00000 | 0.24940 | — | 2,530.35 | 2,530.35 | 0.10264 | 0.02053 | 0.00000 | 2,539.03 |
| 2031 | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | 0.00000 | 0.24323 | 0.22377 | 0.00000 | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | 0.00000 | 2,405.06 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.92195 | 27.8927 | 26.1139 | 0.03982 | 1.24868 | 0.00000 | 1.24868 | 1.14879 | 0.00000 | 1.14879 | — | 4,147.56 | 4,147.56 | 0.16824 | 0.03365 | 0.00000 | 4,161.79 |
| 2024 | 3.33632 | 32.3010 | 31.3632 | 0.05116 | 1.42237 | 4.18014 | 5.60251 | 1.30858 | 2.10009 | 3.40867 | — | 5,434.04 | 5,434.04 | 0.22043 | 0.04409 | 0.00000 | 5,452.69 |
| 2025 | 3.08834 | 28.6589 | 29.5358 | 0.06024 | 1.19058 | 2.60408 | 3.79466 | 1.09534 | 1.02392 | 2.11926 | — | 6,426.10 | 6,426.10 | 0.26067 | 0.05213 | 0.00000 | 6,448.15 |
| 2026 | 2.14106 | 19.3459 | 21.7251 | 0.04426 | 0.77739 | 1.64806 | 2.42545 | 0.71520 | 0.64802 | 1.36322 | — | 4,695.23 | 4,695.23 | 0.19046 | 0.03809 | 0.00000 | 4,711.35 |
| 2027 | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | 0.00000 | 0.24041 | 0.22118 | 0.00000 | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | 0.00000 | 1,718.07 |
| 2028 | 0.97562 | 8.96044 | 13.1046 | 0.02217 | 0.31406 | 0.00000 | 0.31406 | 0.28893 | 0.00000 | 0.28893 | — | 2,302.65 | 2,302.65 | 0.09341 | 0.01868 | 0.00000 | 2,310.55 |
| 2029 | 75.1989 | 9.62168 | 14.5570 | 0.02426 | 0.32290 | 0.00000 | 0.32290 | 0.29707 | 0.00000 | 0.29707 | — | 2,518.59 | 2,518.59 | 0.10217 | 0.02043 | 0.00000 | 2,527.23 |
| 2030 | 269.877 | 6.55171 | 9.98991 | 0.01794 | 0.19359 | 0.00000 | 0.19359 | 0.17810 | 0.00000 | 0.17810 | — | 1,806.87 | 1,806.87 | 0.07329 | 0.01466 | 0.00000 | 1,813.07 |
| 2031 | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | 0.00000 | 0.17374 | 0.15984 | 0.00000 | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | 0.00000 | 1,717.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 0.53326 | 5.09041 | 4.76579 | 0.00727 | 0.22788 | 0.00000 | 0.22788 | 0.20965 | 0.00000 | 0.20965 | — | 686.675 | 686.675 | 0.02785 | 0.00557 | 0.00000 | 689.032 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 0.60888 | 5.89493 | 5.72379 | 0.00934 | 0.25958 | 0.76288 | 1.02246 | 0.23882 | 0.38327 | 0.62208 | — | 899.668 | 899.668 | 0.03649 | 0.00730 | 0.00000 | 902.755 |
| 2025 | 0.56362 | 5.23025 | 5.39028 | 0.01099 | 0.21728 | 0.47524 | 0.69253 | 0.19990 | 0.18687 | 0.38676 | — | 1,063.91 | 1,063.91 | 0.04316 | 0.00863 | 0.00000 | 1,067.57 |
| 2026 | 0.39074 | 3.53062 | 3.96484 | 0.00808 | 0.14187 | 0.30077 | 0.44264 | 0.13052 | 0.11826 | 0.24879 | — | 777.349 | 777.349 | 0.03153 | 0.00631 | 0.00000 | 780.017 |
| 2027 | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | 0.00000 | 0.04387 | 0.04036 | 0.00000 | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | 0.00000 | 284.447 |
| 2028 | 0.17805 | 1.63528 | 2.39159 | 0.00405 | 0.05732 | 0.00000 | 0.05732 | 0.05273 | 0.00000 | 0.05273 | — | 381.230 | 381.230 | 0.01546 | 0.00309 | 0.00000 | 382.538 |
| 2029 | 13.7238 | 1.75596 | 2.65665 | 0.00443 | 0.05893 | 0.00000 | 0.05893 | 0.05421 | 0.00000 | 0.05421 | — | 416.981 | 416.981 | 0.01691 | 0.00338 | 0.00000 | 418.412 |
| 2030 | 49.2525 | 1.19569 | 1.82316 | 0.00327 | 0.03533 | 0.00000 | 0.03533 | 0.03250 | 0.00000 | 0.03250 | — | 299.148 | 299.148 | 0.01213 | 0.00243 | 0.00000 | 300.174 |
| 2031 | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | 0.00000 | 0.03171 | 0.02917 | 0.00000 | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | 0.00000 | 284.418 |

## 2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 17.8504 | 27.8740 | 176.729 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 33,741.4 | 33,741.4 | 1.88795 | 2.35936 | 135.591 | 34,627.3 |
| 2024 | 16.4755 | 25.8142 | 164.118 | 0.06301 | 0.12602 | 23.8752 | 24.0012 | 0.12602 | 5.69672 | 5.82274 | — | 33,172.3 | 33,172.3 | 1.79741 | 2.36010 | 128.011 | 34,048.5 |
| 2025 | 15.8839 | 34.8796 | 156.362 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,920.1 | 40,920.1 | 2.23776 | 3.61944 | 137.406 | 42,192.0 |
| 2026 | 15.2360 | 33.1337 | 145.887 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,138.3 | 40,138.3 | 2.18365 | 3.61686 | 127.120 | 41,397.9 |
| 2027 | 13.5940 | 21.4822 | 131.813 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 31,189.1 | 31,189.1 | 1.57567 | 2.15850 | 100.950 | 31,972.7 |
| 2028 | 13.2921 | 20.1991 | 123.795 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 30,663.2 | 30,663.2 | 1.58145 | 2.15217 | 92.5624 | 31,436.6 |
| 2029 | 15.1311 | 20.2929 | 137.412 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 34,214.5 | 34,214.5 | 1.01132 | 2.26057 | 97.4150 | 35,010.9 |
| 2030 | 14.3605 | 18.9574 | 129.104 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 33,513.4 | 33,513.4 | 0.86385 | 2.26057 | 88.0884 | 34,296.8 |
| 2031 | 11.4690 | 16.3716 | 101.411 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 28,693.5 | 28,693.5 | 0.76531 | 2.02202 | 68.0435 | 29,383.2 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 16.9268 | 32.0989 | 167.993 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 32,352.7 | 32,352.7 | 2.08964 | 2.43007 | 3.50986 | 33,132.6 |
| 2024 | 16.2881 | 41.6078 | 160.355 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 40,351.9 | 40,351.9 | 2.60490 | 3.73397 | 3.77017 | 41,533.5 |
| 2025 | 15.6507 | 39.5287 | 149.234 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 39,596.5 | 39,596.5 | 2.52105 | 3.61944 | 3.57123 | 40,741.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 14.9111 | 36.9950 | 139.088 | 0.11711 | 0.28060 | 26.0069 | 26.2875 | 0.28060 | 6.29379 | 6.57439 | — | 38,844.4 | 38,844.4 | 2.38567 | 3.61944 | 3.29341 | 39,985.9 |
| 2027 | 13.2811 | 24.7084 | 125.351 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.12602 | 5.66927 | 5.79530 | — | 29,925.9 | 29,925.9 | 1.78682 | 2.22888 | 2.62414 | 30,637.4 |
| 2028 | 12.9884 | 23.3740 | 118.504 | 0.06301 | 0.12602 | 23.8584 | 23.9845 | 0.12602 | 5.69280 | 5.81882 | — | 29,419.6 | 29,419.6 | 1.12394 | 2.23333 | 2.39537 | 30,115.6 |
| 2029 | 14.6775 | 23.9125 | 130.830 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,757.0 | 32,757.0 | 1.18023 | 2.35548 | 2.52654 | 33,491.0 |
| 2030 | 14.2552 | 22.4925 | 123.013 | 0.06301 | 0.12602 | 28.0302 | 28.1562 | 0.12602 | 6.67065 | 6.79668 | — | 32,083.9 | 32,083.9 | 1.11722 | 2.34503 | 2.28435 | 32,812.9 |
| 2031 | 11.2369 | 19.5032 | 96.2573 | 0.06301 | 0.12602 | 23.7581 | 23.8841 | 0.06301 | 5.66927 | 5.73229 | — | 27,524.7 | 27,524.7 | 0.90607 | 2.09240 | 1.76284 | 28,172.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 12.3478 | 22.0148 | 114.321 | 0.04489 | 0.08977 | 16.6986 | 16.7884 | 0.08977 | 3.98103 | 4.07080 | — | 23,117.8 | 23,117.8 | 1.44558 | 1.68064 | 41.6803 | 23,696.5 |
| 2024 | 11.4506 | 21.7790 | 106.847 | 0.05106 | 0.10720 | 17.0304 | 17.1376 | 0.10720 | 4.06980 | 4.17700 | — | 23,791.5 | 23,791.5 | 1.45241 | 1.84087 | 40.3527 | 24,416.7 |
| 2025 | 10.9878 | 26.7475 | 101.591 | 0.08365 | 0.20043 | 18.2577 | 18.4582 | 0.20043 | 4.41592 | 4.61634 | — | 28,351.0 | 28,351.0 | 1.69957 | 2.58531 | 42.5093 | 29,206.4 |
| 2026 | 10.4466 | 22.6562 | 93.9237 | 0.06947 | 0.15989 | 17.6763 | 17.8362 | 0.15989 | 4.25422 | 4.41412 | — | 25,629.4 | 25,629.4 | 1.53899 | 2.23602 | 37.3100 | 26,371.6 |
| 2027 | 9.44370 | 16.8349 | 85.6808 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.09002 | 3.97548 | 4.06550 | — | 21,442.0 | 21,442.0 | 1.22603 | 1.59206 | 31.1588 | 21,978.3 |
| 2028 | 9.13924 | 15.9072 | 80.6030 | 0.04513 | 0.09026 | 16.7579 | 16.8482 | 0.09026 | 3.99532 | 4.08558 | — | 21,105.4 | 21,105.4 | 0.70274 | 1.59814 | 28.5838 | 21,627.8 |
| 2029 | 9.23412 | 15.2231 | 79.3992 | 0.04501 | 0.09002 | 17.5462 | 17.6362 | 0.09002 | 4.17967 | 4.26968 | — | 21,419.0 | 21,419.0 | 0.71853 | 1.57899 | 27.0829 | 21,934.5 |
| 2030 | 10.0073 | 15.1203 | 83.5921 | 0.04501 | 0.09002 | 19.6551 | 19.7451 | 0.09002 | 4.67338 | 4.76340 | — | 22,977.5 | 22,977.5 | 0.67692 | 1.61400 | 27.1944 | 23,502.6 |
| 2031 | 7.93331 | 13.1094 | 65.9703 | 0.04501 | 0.09002 | 16.6741 | 16.7641 | 0.04501 | 3.97548 | 4.02049 | — | 19,722.1 | 19,722.1 | 0.59692 | 1.44430 | 20.9840 | 20,188.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2023 | 2.25348 | 4.01770 | 20.8635 | 0.00819 | 0.01638 | 3.04750 | 3.06388 | 0.01638 | 0.72654 | 0.74292 | — | 3,827.42 | 3,827.42 | 0.23933 | 0.27825 | 6.90065 | 3,923.22 |
| 2024 | 2.08973 | 3.97467 | 19.4995 | 0.00932 | 0.01956 | 3.10805 | 3.12762 | 0.01956 | 0.74274 | 0.76230 | — | 3,938.96 | 3,938.96 | 0.24046 | 0.30478 | 6.68085 | 4,042.47 |
| 2025 | 2.00528 | 4.88142 | 18.5404 | 0.01527 | 0.03658 | 3.33204 | 3.36862 | 0.03658 | 0.80590 | 0.84248 | — | 4,693.83 | 4,693.83 | 0.28138 | 0.42803 | 7.03790 | 4,835.46 |
| 2026 | 1.90650 | 4.13475 | 17.1411 | 0.01268 | 0.02918 | 3.22593 | 3.25511 | 0.02918 | 0.77640 | 0.80558 | — | 4,243.25 | 4,243.25 | 0.25480 | 0.37020 | 6.17710 | 4,366.11 |
| 2027 | 1.72348 | 3.07237 | 15.6367 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.01643 | 0.72553 | 0.74195 | — | 3,549.97 | 3,549.97 | 0.20298 | 0.26358 | 5.15869 | 3,638.75 |
| 2028 | 1.66791 | 2.90307 | 14.7100 | 0.00824 | 0.01647 | 3.05832 | 3.07480 | 0.01647 | 0.72915 | 0.74562 | — | 3,494.25 | 3,494.25 | 0.11635 | 0.26459 | 4.73237 | 3,580.73 |
| 2029 | 1.68523 | 2.77822 | 14.4904 | 0.00821 | 0.01643 | 3.20218 | 3.21861 | 0.01643 | 0.76279 | 0.77922 | — | 3,546.15 | 3,546.15 | 0.11896 | 0.26142 | 4.48389 | 3,631.51 |
| 2030 | 1.82633 | 2.75946 | 15.2556 | 0.00821 | 0.01643 | 3.58705 | 3.60348 | 0.01643 | 0.85289 | 0.86932 | — | 3,804.19 | 3,804.19 | 0.11207 | 0.26722 | 4.50234 | 3,891.13 |
| 2031 | 1.44783 | 2.39247 | 12.0396 | 0.00821 | 0.01643 | 3.04302 | 3.05944 | 0.00821 | 0.72553 | 0.73374 | — | 3,265.23 | 3,265.23 | 0.09883 | 0.23912 | 3.47415 | 3,342.43 |

## 2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 135.897 | 47.4975 | 270.183 | 0.29839 | 3.76791 | 0.00000 | 3.76791 | 3.73709 | 0.00000 | 3.73709 | 2,122.28 | 75,547.3 | 77,669.5 | 219.633 | 1.16173 | 33.6617 | 83,540.2 |
| Mit. | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | 0.00000 | 0.12648 | 0.09567 | 0.00000 | 0.09567 | 2,122.28 | 18,381.8 | 20,504.1 | 214.574 | 1.05411 | 33.6617 | 26,216.3 |
| % Reduced | 2% | 95% | 7% | 96% | 97% | — | 97% | 97% | — | 97% | — | 76% | 74% | 2% | 9% | — | 69% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 113.291 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | 0.00000 | 3.64143 | 3.64143 | 0.00000 | 3.64143 | 2,122.28 | 74,874.7 | 76,996.9 | 219.605 | 1.15614 | 33.6617 | 82,865.3 |
| Mit. | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 2,122.28 | 17,709.3 | 19,831.5 | 214.546 | 1.04853 | 33.6617 | 25,541.3 |
| % Reduced | 2% | 100% | 100% | 100% | 100% | — | 100% | 100% | — | 100% | — | 76% | 74% | 2% | 9% | — | 69% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 128.775 | 46.7228 | 191.095 | 0.29495 | 3.72806 | 0.00000 | 3.72806 | 3.70695 | 0.00000 | 3.70695 | 2,122.28 | 75,335.3 | 77,457.6 | 219.624 | 1.15997 | 33.6617 | 83,327.6 |
| Mit. | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | 0.00000 | 0.08663 | 0.06552 | 0.00000 | 0.06552 | 2,122.28 | 18,169.9 | 20,292.2 | 214.565 | 1.05236 | 33.6617 | 26,003.6 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 23.5014 | 8.52692 | 34.8749 | 0.05383 | 0.68037 | 0.00000 | 0.68037 | 0.67652 | 0.00000 | 0.67652 | 351.368 | 12,472.6 | 12,824.0 | 36.3613 | 0.19205 | 5.57308 | 13,795.8 |
| Mit. | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | 0.00000 | 0.01581 | 0.01196 | 0.00000 | 0.01196 | 351.368 | 3,008.24 | 3,359.61 | 35.5237 | 0.17423 | 5.57308 | 4,305.19 |
| % Reduced | 2% | 96% | 10% | 97% | 98% | — | 98% | 98% | — | 98% | — | 76% | 74% | 2% | 9% | — | 69% |

## 2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 135.897 | 47.4975 | 270.183 | 0.29839 | 3.76791 | 0.00000 | 3.76791 | 3.73709 | 0.00000 | 3.73709 | 2,122.28 | 75,547.3 | 77,669.5 | 219.633 | 1.16173 | 33.6617 | 83,540.2 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 113.291 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | 0.00000 | 3.64143 | 3.64143 | 0.00000 | 3.64143 | 2,122.28 | 74,874.7 | 76,996.9 | 219.605 | 1.15614 | 33.6617 | 82,865.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | — | 0.08663 | 0.06552 | — | 0.06552 | 0.00000 | 460.672 | 460.672 | 0.01926 | 0.00382 | — | 462.293 |
| Energy | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 73,811.7 | 73,811.7 | 6.47920 | 0.27974 | — | 74,057.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 128.775 | 46.7228 | 191.095 | 0.29495 | 3.72806 | 0.00000 | 3.72806 | 3.70695 | 0.00000 | 3.70695 | 2,122.28 | 75,335.3 | 77,457.6 | 219.624 | 1.15997 | 33.6617 | 83,327.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Energy | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 12,220.4 | 12,220.4 | 1.07271 | 0.04631 | — | 12,261.0 |
| Water | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Waste | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | 23.5014 | 8.52692 | 34.8749 | 0.05383 | 0.68037 | 0.00000 | 0.68037 | 0.67652 | 0.00000 | 0.67652 | 351.368 | 12,472.6 | 12,824.0 | 36.3613 | 0.19205 | 5.57308 | 13,795.8 |

## 2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | 0.00000 | 0.12648 | 0.09567 | 0.00000 | 0.09567 | 2,122.28 | 18,381.8 | 20,504.1 | 214.574 | 1.05411 | 33.6617 | 26,216.3 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 2,122.28 | 17,709.3 | 19,831.5 | 214.546 | 1.04853 | 33.6617 | 25,541.3 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | — | 0.08663 | 0.06552 | — | 0.06552 | 0.00000 | 460.672 | 460.672 | 0.01926 | 0.00382 | — | 462.293 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Water | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | 126.139 | 1.68412 | 171.930 | 0.00747 | 0.08663 | 0.00000 | 0.08663 | 0.06552 | 0.00000 | 0.06552 | 2,122.28 | 18,169.9 | 20,292.2 | 214.565 | 1.05236 | 33.6617 | 26,003.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Area | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Energy | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |
| Water | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Waste | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | 0.00000 | 0.01581 | 0.01196 | 0.00000 | 0.01196 | 351.368 | 3,008.24 | 3,359.61 | 35.5237 | 0.17423 | 5.57308 | 4,305.19 |

# 3. Construction Emissions Details

## 3.1. Demolition (2023)

### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.84301 | 27.3449 | 23.4886 | 0.03250 | 1.20018 | — | 1.20018 | 1.10416 | — | 1.10416 | — | 3,425.15 | 3,425.15 | 0.13894 | 0.02779 | — | 3,436.90 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.02516 | 19.4786 | 16.7316 | 0.02315 | 0.85492 | — | 0.85492 | 0.78653 | — | 0.78653 | — | 2,439.83 | 2,439.83 | 0.09897 | 0.01979 | — | 2,448.20 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36959 | 3.55484 | 3.05352 | 0.00423 | 0.15602 | — | 0.15602 | 0.14354 | — | 0.14354 | — | 403.942 | 403.942 | 0.01639 | 0.00328 | — | 405.328 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08098 | 0.06053 | 0.79003 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 112.673 | 112.673 | 0.00677 | 0.00445 | 0.51948 | 114.690 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07686 | 0.07637 | 0.74845 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 106.147 | 106.147 | 0.00776 | 0.00479 | 0.01343 | 107.781 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05604 | 0.05123 | 0.50863 | 0.00000 | 0.00000 | 0.07022 | 0.07022 | 0.00000 | 0.01644 | 0.01644 | — | 75.9621 | 75.9621 | 0.00529 | 0.00317 | 0.15950 | 77.1995 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01023 | 0.00935 | 0.09282 | 0.00000 | 0.00000 | 0.01282 | 0.01282 | 0.00000 | 0.00300 | 0.00300 | — | 12.5764 | 12.5764 | 0.00088 | 0.00053 | 0.02641 | 12.7813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.2. Demolition (2024)

### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29181 | 2.77648 | 2.42515 | 0.00363 | 0.11829 | — | 0.11829 | 0.10883 | — | 0.10883 | — | 382.072 | 382.072 | 0.01550 | 0.00310 | — | 383.383 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05326 | 0.50671 | 0.44259 | 0.00066 | 0.02159 | — | 0.02159 | 0.01986 | — | 0.01986 | — | 63.2563 | 63.2563 | 0.00257 | 0.00051 | — | 63.4734 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00806 | 0.00721 | 0.07363 | 0.00000 | 0.00000 | 0.01100 | 0.01100 | 0.00000 | 0.00257 | 0.00257 | — | 11.6771 | 11.6771 | 0.00079 | 0.00050 | 0.02328 | 11.8683 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00147 | 0.00132 | 0.01344 | 0.00000 | 0.00000 | 0.00201 | 0.00201 | 0.00000 | 0.00047 | 0.00047 | — | 1.93328 | 1.93328 | 0.00013 | 0.00008 | 0.00385 | 1.96493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.61609 | 24.8909 | 21.7413 | 0.03251 | 1.06046 | — | 1.06046 | 0.97562 | — | 0.97562 | — | 3,425.24 | 3,425.24 | 0.13894 | 0.02779 | — | 3,436.99 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29181 | 2.77648 | 2.42515 | 0.00363 | 0.11829 | — | 0.11829 | 0.10883 | — | 0.10883 | — | 382.072 | 382.072 | 0.01550 | 0.00310 | — | 383.383 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05326 | 0.50671 | 0.44259 | 0.00066 | 0.02159 | — | 0.02159 | 0.01986 | — | 0.01986 | — | 63.2563 | 63.2563 | 0.00257 | 0.00051 | — | 63.4734 |
| Demolition | — | — | — | — | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07322 | 0.06911 | 0.69499 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 104.200 | 104.200 | 0.00776 | 0.00445 | 0.01254 | 105.734 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00806 | 0.00721 | 0.07363 | 0.00000 | 0.00000 | 0.01100 | 0.01100 | 0.00000 | 0.00257 | 0.00257 | — | 11.6771 | 11.6771 | 0.00079 | 0.00050 | 0.02328 | 11.8683 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00147 | 0.00132 | 0.01344 | 0.00000 | 0.00000 | 0.00201 | 0.00201 | 0.00000 | 0.00047 | 0.00047 | — | 1.93328 | 1.93328 | 0.00013 | 0.00008 | 0.00385 | 1.96493 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.3. Site Preparation (2024)

### 3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.79777 | 17.7308 | 16.2376 | 0.02410 | 0.78887 | — | 0.78887 | 0.72576 | — | 0.72576 | — | 2,611.60 | 2,611.60 | 0.10594 | 0.02119 | — | 2,620.56 |
| Dust From Material Movement | — | — | — | — | — | 3.78061 | 3.78061 | — | 1.94299 | 1.94299 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32809 | 3.23586 | 2.96336 | 0.00440 | 0.14397 | — | 0.14397 | 0.13245 | — | 0.13245 | — | 432.380 | 432.380 | 0.01754 | 0.00351 | — | 433.864 |
| Dust From Material Movement | — | — | — | — | — | 0.68996 | 0.68996 | — | 0.35460 | 0.35460 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08697 | 0.06254 | 0.85532 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 129.007 | 129.007 | 0.00751 | 0.00520 | 0.56426 | 131.308 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08542 | 0.08063 | 0.81082 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.567 | 121.567 | 0.00905 | 0.00520 | 0.01463 | 123.357 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04156 | 0.03720 | 0.37978 | 0.00000 | 0.00000 | 0.05672 | 0.05672 | 0.00000 | 0.01328 | 0.01328 | — | 60.2295 | 60.2295 | 0.00408 | 0.00256 | 0.12007 | 61.2154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00758 | 0.00679 | 0.06931 | 0.00000 | 0.00000 | 0.01035 | 0.01035 | 0.00000 | 0.00242 | 0.00242 | — | 9.97168 | 9.97168 | 0.00068 | 0.00042 | 0.01988 | 10.1349 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.64547 | 35.9540 | 32.9262 | 0.04887 | 1.59966 | — | 1.59966 | 1.47169 | — | 1.47169 | — | 5,295.74 | 5,295.74 | 0.21482 | 0.04296 | — | 5,313.92 |
| Dust From Material Movement | — | — | — | — | — | 7.66623 | 7.66623 | — | 3.93995 | 3.93995 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.79777 | 17.7308 | 16.2376 | 0.02410 | 0.78887 | — | 0.78887 | 0.72576 | — | 0.72576 | — | 2,611.60 | 2,611.60 | 0.10594 | 0.02119 | — | 2,620.56 |
| Dust From Material Movement | — | — | — | — | — | 3.78061 | 3.78061 | — | 1.94299 | 1.94299 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32809 | 3.23586 | 2.96336 | 0.00440 | 0.14397 | — | 0.14397 | 0.13245 | — | 0.13245 | — | 432.380 | 432.380 | 0.01754 | 0.00351 | — | 433.864 |
| Dust From Material Movement | — | — | — | — | — | 0.68996 | 0.68996 | — | 0.35460 | 0.35460 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08697 | 0.06254 | 0.85532 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 129.007 | 129.007 | 0.00751 | 0.00520 | 0.56426 | 131.308 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.08542 | 0.08063 | 0.81082 | 0.00000 | 0.00000 | 0.11709 | 0.11709 | 0.00000 | 0.02745 | 0.02745 | — | 121.567 | 121.567 | 0.00905 | 0.00520 | 0.01463 | 123.357 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04156 | 0.03720 | 0.37978 | 0.00000 | 0.00000 | 0.05672 | 0.05672 | 0.00000 | 0.01328 | 0.01328 | — | 60.2295 | 60.2295 | 0.00408 | 0.00256 | 0.12007 | 61.2154 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00758 | 0.00679 | 0.06931 | 0.00000 | 0.00000 | 0.01035 | 0.01035 | 0.00000 | 0.00242 | 0.00242 | — | 9.97168 | 9.97168 | 0.00068 | 0.00042 | 0.01988 | 10.1349 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.4. Grading (2024)

### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.51698 | 34.2879 | 30.1743 | 0.06092 | 1.44805 | — | 1.44805 | 1.33221 | — | 1.33221 | — | 6,598.19 | 6,598.19 | 0.26765 | 0.05353 | — | 6,620.83 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38542 | 3.75757 | 3.30677 | 0.00668 | 0.15869 | — | 0.15869 | 0.14600 | — | 0.14600 | — | 723.089 | 723.089 | 0.02933 | 0.00587 | — | 725.571 |
| Dust From Material Movement | — | — | — | — | — | 0.39953 | 0.39953 | — | 0.15709 | 0.15709 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07034 | 0.68576 | 0.60349 | 0.00122 | 0.02896 | — | 0.02896 | 0.02664 | — | 0.02664 | — | 119.716 | 119.716 | 0.00486 | 0.00097 | — | 120.127 |
| Dust From Material Movement | — | — | — | — | — | 0.07291 | 0.07291 | — | 0.02867 | 0.02867 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09763 | 0.09215 | 0.92666 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 138.934 | 138.934 | 0.01035 | 0.00594 | 0.01672 | 140.979 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.6884 | 4.13743 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,519.35 | 8,519.35 | 0.51267 | 1.37313 | 0.44945 | 8,941.81 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.01055 | 0.00945 | 0.09645 | 0.00000 | 0.00000 | 0.01441 | 0.01441 | 0.00000 | 0.00337 | 0.00337 | — | 15.2964 | 15.2964 | 0.00104 | 0.00065 | 0.03049 | 15.5468 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02005 | 1.25833 | 0.45031 | 0.00593 | 0.01694 | 0.22857 | 0.24551 | 0.01694 | 0.06420 | 0.08114 | — | 933.397 | 933.397 | 0.05618 | 0.15048 | 0.81553 | 980.460 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00193 | 0.00172 | 0.01760 | 0.00000 | 0.00000 | 0.00263 | 0.00263 | 0.00000 | 0.00062 | 0.00062 | — | 2.53249 | 2.53249 | 0.00017 | 0.00011 | 0.00505 | 2.57394 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00366 | 0.22965 | 0.08218 | 0.00108 | 0.00309 | 0.04171 | 0.04481 | 0.00309 | 0.01172 | 0.01481 | — | 154.535 | 154.535 | 0.00930 | 0.02491 | 0.13502 | 162.326 |

### 3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.51698 | 34.2879 | 30.1743 | 0.06092 | 1.44805 | — | 1.44805 | 1.33221 | — | 1.33221 | — | 6,598.19 | 6,598.19 | 0.26765 | 0.05353 | — | 6,620.83 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.38542 | 3.75757 | 3.30677 | 0.00668 | 0.15869 | — | 0.15869 | 0.14600 | — | 0.14600 | — | 723.089 | 723.089 | 0.02933 | 0.00587 | — | 725.571 |
| Dust From Material Movement | — | — | — | — | — | 0.39953 | 0.39953 | — | 0.15709 | 0.15709 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07034 | 0.68576 | 0.60349 | 0.00122 | 0.02896 | — | 0.02896 | 0.02664 | — | 0.02664 | — | 119.716 | 119.716 | 0.00486 | 0.00097 | — | 120.127 |
| Dust From Material Movement | — | — | — | — | — | 0.07291 | 0.07291 | — | 0.02867 | 0.02867 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09763 | 0.09215 | 0.92666 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 138.934 | 138.934 | 0.01035 | 0.00594 | 0.01672 | 140.979 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.6884 | 4.13743 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,519.35 | 8,519.35 | 0.51267 | 1.37313 | 0.44945 | 8,941.81 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01055 | 0.00945 | 0.09645 | 0.00000 | 0.00000 | 0.01441 | 0.01441 | 0.00000 | 0.00337 | 0.00337 | — | 15.2964 | 15.2964 | 0.00104 | 0.00065 | 0.03049 | 15.5468 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02005 | 1.25833 | 0.45031 | 0.00593 | 0.01694 | 0.22857 | 0.24551 | 0.01694 | 0.06420 | 0.08114 | — | 933.397 | 933.397 | 0.05618 | 0.15048 | 0.81553 | 980.460 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00193 | 0.00172 | 0.01760 | 0.00000 | 0.00000 | 0.00263 | 0.00263 | 0.00000 | 0.00062 | 0.00062 | — | 2.53249 | 2.53249 | 0.00017 | 0.00011 | 0.00505 | 2.57394 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.00366 | 0.22965 | 0.08218 | 0.00108 | 0.00309 | 0.04171 | 0.04481 | 0.00309 | 0.01172 | 0.01481 | — | 154.535 | 154.535 | 0.00930 | 0.02491 | 0.13502 | 162.326 |

## 3.5. Grading (2025)

### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28341 | 21.1987 | 20.2214 | 0.04352 | 0.88212 | — | 0.88212 | 0.81155 | — | 0.81155 | — | 4,713.47 | 4,713.47 | 0.19120 | 0.03824 | — | 4,729.65 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 2.60408 | 2.60408 | — | 1.02392 | 1.02392 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41672 | 3.86877 | 3.69041 | 0.00794 | 0.16099 | — | 0.16099 | 0.14811 | — | 0.14811 | — | 780.369 | 780.369 | 0.03166 | 0.00633 | — | 783.047 |
| Dust From Material Movement | — | — | — | — | — | 0.47524 | 0.47524 | — | 0.18687 | 0.18687 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09498 | 0.06598 | 0.90670 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 144.589 | 144.589 | 0.00814 | 0.00594 | 0.59710 | 147.159 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.6115 | 3.98801 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,354.76 | 8,354.76 | 0.51009 | 1.32161 | 17.1675 | 8,778.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 11.2169 | 4.03180 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,358.54 | 8,358.54 | 0.51009 | 1.32161 | 0.44503 | 8,765.58 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.06564 | 0.05467 | 0.58420 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 97.7910 | 97.7910 | 0.00645 | 0.00424 | 0.18468 | 99.4011 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.13065 | 7.86487 | 2.86146 | 0.03864 | 0.11041 | 1.48980 | 1.60021 | 0.11041 | 0.41845 | 0.52886 | — | 5,968.82 | 5,968.82 | 0.36435 | 0.94400 | 5.31550 | 6,264.56 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01198 | 0.00998 | 0.10662 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 16.1904 | 16.1904 | 0.00107 | 0.00070 | 0.03058 | 16.4570 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02384 | 1.43534 | 0.52222 | 0.00705 | 0.02015 | 0.27189 | 0.29204 | 0.02015 | 0.07637 | 0.09652 | — | 988.207 | 988.207 | 0.06032 | 0.15629 | 0.88004 | 1,037.17 |

### 3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.19677 | 29.6782 | 28.3100 | 0.06093 | 1.23497 | — | 1.23497 | 1.13618 | — | 1.13618 | — | 6,598.86 | 6,598.86 | 0.26768 | 0.05354 | — | 6,621.50 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.28341 | 21.1987 | 20.2214 | 0.04352 | 0.88212 | — | 0.88212 | 0.81155 | — | 0.81155 | — | 4,713.47 | 4,713.47 | 0.19120 | 0.03824 | — | 4,729.65 |
| Dust From Material Movement | — | — | — | — | — | 2.60408 | 2.60408 | — | 1.02392 | 1.02392 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41672 | 3.86877 | 3.69041 | 0.00794 | 0.16099 | — | 0.16099 | 0.14811 | — | 0.14811 | — | 780.369 | 780.369 | 0.03166 | 0.00633 | — | 783.047 |
| Dust From Material Movement | — | — | — | — | — | 0.47524 | 0.47524 | — | 0.18687 | 0.18687 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09498 | 0.06598 | 0.90670 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 144.589 | 144.589 | 0.00814 | 0.00594 | 0.59710 | 147.159 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.6115 | 3.98801 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,354.76 | 8,354.76 | 0.51009 | 1.32161 | 17.1675 | 8,778.52 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09366 | 0.08665 | 0.86088 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 136.273 | 136.273 | 0.00991 | 0.00594 | 0.01552 | 138.306 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.17776 | 11.2169 | 4.03180 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,358.54 | 8,358.54 | 0.51009 | 1.32161 | 0.44503 | 8,765.58 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06564 | 0.05467 | 0.58420 | 0.00000 | 0.00000 | 0.09389 | 0.09389 | 0.00000 | 0.02198 | 0.02198 | — | 97.7910 | 97.7910 | 0.00645 | 0.00424 | 0.18468 | 99.4011 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.13065 | 7.86487 | 2.86146 | 0.03864 | 0.11041 | 1.48980 | 1.60021 | 0.11041 | 0.41845 | 0.52886 | — | 5,968.82 | 5,968.82 | 0.36435 | 0.94400 | 5.31550 | 6,264.56 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01198 | 0.00998 | 0.10662 | 0.00000 | 0.00000 | 0.01713 | 0.01713 | 0.00000 | 0.00401 | 0.00401 | — | 16.1904 | 16.1904 | 0.00107 | 0.00070 | 0.03058 | 16.4570 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.02384 | 1.43534 | 0.52222 | 0.00705 | 0.02015 | 0.27189 | 0.29204 | 0.02015 | 0.07637 | 0.09652 | — | 988.207 | 988.207 | 0.06032 | 0.15629 | 0.88004 | 1,037.17 |

## 3.6. Grading (2026)

### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.37606 | 12.3073 | 12.4634 | 0.02754 | 0.50692 | — | 0.50692 | 0.46637 | — | 0.46637 | — | 2,982.92 | 2,982.92 | 0.12100 | 0.02420 | — | 2,993.15 |
| Dust From Material Movement | — | — | — | — | — | 1.64806 | 1.64806 | — | 0.64802 | 0.64802 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25113 | 2.24608 | 2.27458 | 0.00503 | 0.09251 | — | 0.09251 | 0.08511 | — | 0.08511 | — | 493.856 | 493.856 | 0.02003 | 0.00401 | — | 495.551 |
| Dust From Material Movement | — | — | — | — | — | 0.30077 | 0.30077 | — | 0.11826 | 0.11826 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.18806 | 10.2869 | 3.83343 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,187.74 | 8,187.74 | 0.45599 | 1.31903 | 16.1360 | 8,608.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 10.8459 | 3.87723 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,191.63 | 8,191.63 | 0.45599 | 1.32161 | 0.41850 | 8,597.28 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03975 | 0.03231 | 0.34596 | 0.00000 | 0.00000 | 0.05942 | 0.05942 | 0.00000 | 0.01391 | 0.01391 | — | 60.7266 | 60.7266 | 0.00408 | 0.00268 | 0.10797 | 61.7367 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.08269 | 4.80746 | 1.74107 | 0.02446 | 0.06988 | 0.94286 | 1.01273 | 0.06988 | 0.26483 | 0.33471 | — | 3,702.05 | 3,702.05 | 0.20613 | 0.59627 | 3.14756 | 3,888.04 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00725 | 0.00590 | 0.06314 | 0.00000 | 0.00000 | 0.01084 | 0.01084 | 0.00000 | 0.00254 | 0.00254 | — | 10.0540 | 10.0540 | 0.00068 | 0.00044 | 0.01788 | 10.2212 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.01509 | 0.87736 | 0.31775 | 0.00446 | 0.01275 | 0.17207 | 0.18482 | 0.01275 | 0.04833 | 0.06108 | — | 612.916 | 612.916 | 0.03413 | 0.09872 | 0.52111 | 643.709 |

### 3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.04400 | 27.2253 | 27.5707 | 0.06093 | 1.12137 | — | 1.12137 | 1.03166 | — | 1.03166 | — | 6,598.58 | 6,598.58 | 0.26767 | 0.05353 | — | 6,621.22 |
| Dust From Material Movement | — | — | — | — | — | 3.64571 | 3.64571 | — | 1.43349 | 1.43349 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.37606 | 12.3073 | 12.4634 | 0.02754 | 0.50692 | — | 0.50692 | 0.46637 | — | 0.46637 | — | 2,982.92 | 2,982.92 | 0.12100 | 0.02420 | — | 2,993.15 |
| Dust From Material Movement | — | — | — | — | — | 1.64806 | 1.64806 | — | 0.64802 | 0.64802 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25113 | 2.24608 | 2.27458 | 0.00503 | 0.09251 | — | 0.09251 | 0.08511 | — | 0.08511 | — | 493.856 | 493.856 | 0.02003 | 0.00401 | — | 495.551 |
| Dust From Material Movement | — | — | — | — | — | 0.30077 | 0.30077 | — | 0.11826 | 0.11826 | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09101 | 0.06092 | 0.84513 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 141.847 | 141.847 | 0.00814 | 0.00594 | 0.55352 | 144.374 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.18806 | 10.2869 | 3.83343 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,187.74 | 8,187.74 | 0.45599 | 1.31903 | 16.1360 | 8,608.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08925 | 0.07698 | 0.80149 | 0.00000 | 0.00000 | 0.13382 | 0.13382 | 0.00000 | 0.03137 | 0.03137 | — | 133.711 | 133.711 | 0.00947 | 0.00594 | 0.01433 | 135.732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.17776 | 10.8459 | 3.87723 | 0.05410 | 0.15457 | 2.11498 | 2.26956 | 0.15457 | 0.59315 | 0.74773 | — | 8,191.63 | 8,191.63 | 0.45599 | 1.32161 | 0.41850 | 8,597.28 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03975 | 0.03231 | 0.34596 | 0.00000 | 0.00000 | 0.05942 | 0.05942 | 0.00000 | 0.01391 | 0.01391 | — | 60.7266 | 60.7266 | 0.00408 | 0.00268 | 0.10797 | 61.7367 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.08269 | 4.80746 | 1.74107 | 0.02446 | 0.06988 | 0.94286 | 1.01273 | 0.06988 | 0.26483 | 0.33471 | — | 3,702.05 | 3,702.05 | 0.20613 | 0.59627 | 3.14756 | 3,888.04 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00725 | 0.00590 | 0.06314 | 0.00000 | 0.00000 | 0.01084 | 0.01084 | 0.00000 | 0.00254 | 0.00254 | — | 10.0540 | 10.0540 | 0.00068 | 0.00044 | 0.01788 | 10.2212 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.01509 | 0.87736 | 0.31775 | 0.00446 | 0.01275 | 0.17207 | 0.18482 | 0.01275 | 0.04833 | 0.06108 | — | 612.916 | 612.916 | 0.03413 | 0.09872 | 0.52111 | 643.709 |

## 3.7. Building Construction (2023)

### 3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.2352 | 12.8835 | 168.143 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,980.5 | 23,980.5 | 1.44072 | 0.94805 | 110.562 | 24,409.6 |
| Vendor | 0.53419 | 14.9300 | 7.79565 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,648.20 | 9,648.20 | 0.44046 | 1.40686 | 24.5092 | 10,103.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.3575 | 16.2533 | 159.293 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,591.6 | 22,591.6 | 1.65187 | 1.01843 | 2.85937 | 22,939.2 |
| Vendor | 0.49239 | 15.7692 | 7.95177 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,655.02 | 9,655.02 | 0.43001 | 1.40686 | 0.63706 | 10,085.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9262 | 10.9024 | 108.252 | 0.00000 | 0.00000 | 14.9461 | 14.9461 | 0.00000 | 3.49913 | 3.49913 | — | 16,167.2 | 16,167.2 | 1.12654 | 0.67532 | 33.9468 | 16,430.5 |
| Vendor | 0.36563 | 11.0612 | 5.56006 | 0.04489 | 0.08977 | 1.68230 | 1.77208 | 0.08977 | 0.46546 | 0.55523 | — | 6,874.71 | 6,874.71 | 0.31375 | 1.00214 | 7.57397 | 7,188.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.17653 | 1.98969 | 19.7560 | 0.00000 | 0.00000 | 2.72766 | 2.72766 | 0.00000 | 0.63859 | 0.63859 | — | 2,676.66 | 2,676.66 | 0.18651 | 0.11181 | 5.62028 | 2,720.26 |
| Vendor | 0.06673 | 2.01866 | 1.01471 | 0.00819 | 0.01638 | 0.30702 | 0.32340 | 0.01638 | 0.08495 | 0.10133 | — | 1,138.19 | 1,138.19 | 0.05195 | 0.16592 | 1.25396 | 1,190.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.25896 | 11.8121 | 13.1713 | 0.02339 | 0.55278 | — | 0.55278 | 0.50856 | — | 0.50856 | — | 2,397.39 | 2,397.39 | 0.09725 | 0.01945 | — | 2,405.61 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.89679 | 8.41407 | 9.38227 | 0.01666 | 0.39376 | — | 0.39376 | 0.36226 | — | 0.36226 | — | 1,707.73 | 1,707.73 | 0.06927 | 0.01385 | — | 1,713.59 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16366 | 1.53557 | 1.71226 | 0.00304 | 0.07186 | — | 0.07186 | 0.06611 | — | 0.06611 | — | 282.734 | 282.734 | 0.01147 | 0.00229 | — | 283.704 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 17.2352 | 12.8835 | 168.143 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,980.5 | 23,980.5 | 1.44072 | 0.94805 | 110.562 | 24,409.6 |
| Vendor | 0.53419 | 14.9300 | 7.79565 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,648.20 | 9,648.20 | 0.44046 | 1.40686 | 24.5092 | 10,103.0 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 16.3575 | 16.2533 | 159.293 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,591.6 | 22,591.6 | 1.65187 | 1.01843 | 2.85937 | 22,939.2 |
| Vendor | 0.49239 | 15.7692 | 7.95177 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,655.02 | 9,655.02 | 0.43001 | 1.40686 | 0.63706 | 10,085.7 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9262 | 10.9024 | 108.252 | 0.00000 | 0.00000 | 14.9461 | 14.9461 | 0.00000 | 3.49913 | 3.49913 | — | 16,167.2 | 16,167.2 | 1.12654 | 0.67532 | 33.9468 | 16,430.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.36563 | 11.0612 | 5.56006 | 0.04489 | 0.08977 | 1.68230 | 1.77208 | 0.08977 | 0.46546 | 0.55523 | — | 6,874.71 | 6,874.71 | 0.31375 | 1.00214 | 7.57397 | 7,188.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.17653 | 1.98969 | 19.7560 | 0.00000 | 0.00000 | 2.72766 | 2.72766 | 0.00000 | 0.63859 | 0.63859 | — | 2,676.66 | 2,676.66 | 0.18651 | 0.11181 | 5.62028 | 2,720.26 |
| Vendor | 0.06673 | 2.01866 | 1.01471 | 0.00819 | 0.01638 | 0.30702 | 0.32340 | 0.01638 | 0.08495 | 0.10133 | — | 1,138.19 | 1,138.19 | 0.05195 | 0.16592 | 1.25396 | 1,190.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.8. Building Construction (2024)

### 3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.8648 | 11.4096 | 156.034 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,534.5 | 23,534.5 | 1.37034 | 0.94805 | 102.937 | 23,954.2 |
| Vendor | 0.52374 | 14.3420 | 7.22885 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,508.80 | 9,508.80 | 0.41956 | 1.40686 | 24.5092 | 9,963.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.5833 | 14.7092 | 147.917 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,177.2 | 22,177.2 | 1.65187 | 0.94805 | 2.66874 | 22,503.7 |
| Vendor | 0.42938 | 15.1181 | 7.37452 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,516.40 | 9,516.40 | 0.43001 | 1.40686 | 0.63526 | 9,947.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0102 | 9.85630 | 100.624 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 15,958.0 | 15,958.0 | 1.08232 | 0.67903 | 31.8123 | 16,219.3 |
| Vendor | 0.36016 | 10.6105 | 5.22230 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,812.86 | 6,812.86 | 0.30799 | 1.00765 | 7.55105 | 7,128.39 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.00936 | 1.79877 | 18.3639 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,642.04 | 2,642.04 | 0.17919 | 0.11242 | 5.26688 | 2,685.29 |
| Vendor | 0.06573 | 1.93642 | 0.95307 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,127.95 | 1,127.95 | 0.05099 | 0.16683 | 1.25016 | 1,180.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.20254 | 11.2199 | 13.1153 | 0.02340 | 0.49776 | — | 0.49776 | 0.45794 | — | 0.45794 | — | 2,397.63 | 2,397.63 | 0.09726 | 0.01945 | — | 2,405.86 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.86131 | 8.03616 | 9.39373 | 0.01676 | 0.35652 | — | 0.35652 | 0.32800 | — | 0.32800 | — | 1,717.28 | 1,717.28 | 0.06966 | 0.01393 | — | 1,723.18 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15719 | 1.46660 | 1.71436 | 0.00306 | 0.06506 | — | 0.06506 | 0.05986 | — | 0.05986 | — | 284.316 | 284.316 | 0.01153 | 0.00231 | — | 285.292 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.8.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.8648 | 11.4096 | 156.034 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,534.5 | 23,534.5 | 1.37034 | 0.94805 | 102.937 | 23,954.2 |
| Vendor | 0.52374 | 14.3420 | 7.22885 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,508.80 | 9,508.80 | 0.41956 | 1.40686 | 24.5092 | 9,963.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.5833 | 14.7092 | 147.917 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,177.2 | 22,177.2 | 1.65187 | 0.94805 | 2.66874 | 22,503.7 |
| Vendor | 0.42938 | 15.1181 | 7.37452 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,516.40 | 9,516.40 | 0.43001 | 1.40686 | 0.63526 | 9,947.03 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.0102 | 9.85630 | 100.624 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 15,958.0 | 15,958.0 | 1.08232 | 0.67903 | 31.8123 | 16,219.3 |
| Vendor | 0.36016 | 10.6105 | 5.22230 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,812.86 | 6,812.86 | 0.30799 | 1.00765 | 7.55105 | 7,128.39 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.00936 | 1.79877 | 18.3639 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,642.04 | 2,642.04 | 0.17919 | 0.11242 | 5.26688 | 2,685.29 |
| Vendor | 0.06573 | 1.93642 | 0.95307 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,127.95 | 1,127.95 | 0.05099 | 0.16683 | 1.25016 | 1,180.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.9. Building Construction (2025)

### 3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.1610 | 10.5320 | 144.732 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,079.8 | 23,079.8 | 1.29996 | 0.94805 | 95.3122 | 23,490.1 |
| Vendor | 0.43983 | 13.6701 | 6.73552 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,340.94 | 9,340.94 | 0.41956 | 1.34384 | 24.3290 | 9,776.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.9499 | 13.8315 | 137.418 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,752.4 | 21,752.4 | 1.58149 | 0.94805 | 2.47812 | 22,076.9 |
| Vendor | 0.42938 | 14.3936 | 6.92330 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,349.28 | 9,349.28 | 0.41956 | 1.34384 | 0.63255 | 9,760.87 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.4774 | 8.72638 | 93.2523 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,609.8 | 15,609.8 | 1.02909 | 0.67718 | 29.4787 | 15,866.8 |
| Vendor | 0.31417 | 10.1016 | 4.89319 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,674.59 | 6,674.59 | 0.29969 | 0.95989 | 7.53041 | 6,975.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.91212 | 1.59256 | 17.0185 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,584.38 | 2,584.38 | 0.17038 | 0.11211 | 4.88054 | 2,626.93 |
| Vendor | 0.05734 | 1.84354 | 0.89301 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,105.06 | 1,105.06 | 0.04962 | 0.15892 | 1.24675 | 1,154.90 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.12690 | 10.4442 | 13.0401 | 0.02340 | 0.43184 | — | 0.43184 | 0.39729 | — | 0.39729 | — | 2,397.68 | 2,397.68 | 0.09726 | 0.01945 | — | 2,405.91 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.80493 | 7.46016 | 9.31434 | 0.01671 | 0.30846 | — | 0.30846 | 0.28378 | — | 0.28378 | — | 1,712.63 | 1,712.63 | 0.06947 | 0.01389 | — | 1,718.51 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14690 | 1.36148 | 1.69987 | 0.00305 | 0.05629 | — | 0.05629 | 0.05179 | — | 0.05179 | — | 283.545 | 283.545 | 0.01150 | 0.00230 | — | 284.518 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.9.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 15.1610 | 10.5320 | 144.732 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 23,079.8 | 23,079.8 | 1.29996 | 0.94805 | 95.3122 | 23,490.1 |
| Vendor | 0.43983 | 13.6701 | 6.73552 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,340.94 | 9,340.94 | 0.41956 | 1.34384 | 24.3290 | 9,776.22 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.9499 | 13.8315 | 137.418 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,752.4 | 21,752.4 | 1.58149 | 0.94805 | 2.47812 | 22,076.9 |
| Vendor | 0.42938 | 14.3936 | 6.92330 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,349.28 | 9,349.28 | 0.41956 | 1.34384 | 0.63255 | 9,760.87 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.4774 | 8.72638 | 93.2523 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,609.8 | 15,609.8 | 1.02909 | 0.67718 | 29.4787 | 15,866.8 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.31417 | 10.1016 | 4.89319 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,674.59 | 6,674.59 | 0.29969 | 0.95989 | 7.53041 | 6,975.66 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.91212 | 1.59256 | 17.0185 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,584.38 | 2,584.38 | 0.17038 | 0.11211 | 4.88054 | 2,626.93 |
| Vendor | 0.05734 | 1.84354 | 0.89301 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,105.06 | 1,105.06 | 0.04962 | 0.15892 | 1.24675 | 1,154.90 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.10. Building Construction (2026)

### 3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.5276 | 9.72470 | 134.904 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,642.1 | 22,642.1 | 1.29996 | 0.94805 | 88.3544 | 23,045.5 |
| Vendor | 0.42938 | 13.0612 | 6.30520 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,166.61 | 9,166.61 | 0.41956 | 1.34384 | 22.0763 | 9,599.64 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.2460 | 12.2873 | 127.937 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,343.5 | 21,343.5 | 1.51110 | 0.94805 | 2.28749 | 21,666.1 |
| Vendor | 0.39803 | 13.7847 | 6.47208 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,175.54 | 9,175.54 | 0.40911 | 1.34384 | 0.57308 | 9,586.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.0249 | 8.14975 | 87.2583 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,316.4 | 15,316.4 | 1.02909 | 0.67718 | 27.2321 | 15,571.2 |
| Vendor | 0.29924 | 9.66666 | 4.57835 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,550.23 | 6,550.23 | 0.29969 | 0.95989 | 6.82243 | 6,850.59 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.82955 | 1.48733 | 15.9246 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,535.81 | 2,535.81 | 0.17038 | 0.11211 | 4.50858 | 2,577.99 |
| Vendor | 0.05461 | 1.76416 | 0.83555 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,084.46 | 1,084.46 | 0.04962 | 0.15892 | 1.12953 | 1,134.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.07101 | 9.85401 | 12.9664 | 0.02340 | 0.37865 | — | 0.37865 | 0.34836 | — | 0.34836 | — | 2,397.24 | 2,397.24 | 0.09724 | 0.01945 | — | 2,405.47 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76501 | 7.03858 | 9.26170 | 0.01671 | 0.27047 | — | 0.27047 | 0.24883 | — | 0.24883 | — | 1,712.31 | 1,712.31 | 0.06946 | 0.01389 | — | 1,718.19 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13961 | 1.28454 | 1.69026 | 0.00305 | 0.04936 | — | 0.04936 | 0.04541 | — | 0.04541 | — | 283.493 | 283.493 | 0.01150 | 0.00230 | — | 284.466 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.10.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.5276 | 9.72470 | 134.904 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,642.1 | 22,642.1 | 1.29996 | 0.94805 | 88.3544 | 23,045.5 |
| Vendor | 0.42938 | 13.0612 | 6.30520 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,166.61 | 9,166.61 | 0.41956 | 1.34384 | 22.0763 | 9,599.64 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 14.2460 | 12.2873 | 127.937 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,343.5 | 21,343.5 | 1.51110 | 0.94805 | 2.28749 | 21,666.1 |
| Vendor | 0.39803 | 13.7847 | 6.47208 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 9,175.54 | 9,175.54 | 0.40911 | 1.34384 | 0.57308 | 9,586.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.0249 | 8.14975 | 87.2583 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,316.4 | 15,316.4 | 1.02909 | 0.67718 | 27.2321 | 15,571.2 |
| Vendor | 0.29924 | 9.66666 | 4.57835 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,550.23 | 6,550.23 | 0.29969 | 0.95989 | 6.82243 | 6,850.59 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.82955 | 1.48733 | 15.9246 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,535.81 | 2,535.81 | 0.17038 | 0.11211 | 4.50858 | 2,577.99 |
| Vendor | 0.05461 | 1.76416 | 0.83555 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,084.46 | 1,084.46 | 0.04962 | 0.15892 | 1.12953 | 1,134.19 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.11. Building Construction (2027)

### 3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 13.2276 | 8.98780 | 125.812 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,218.3 | 22,218.3 | 1.22958 | 0.87767 | 81.3966 | 22,592.0 |
| Vendor | 0.36637 | 12.4944 | 6.00090 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,970.79 | 8,970.79 | 0.34610 | 1.28083 | 19.5533 | 9,380.69 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.9461 | 11.4800 | 119.194 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,945.8 | 20,945.8 | 1.44072 | 0.94805 | 2.11593 | 21,266.5 |
| Vendor | 0.33502 | 13.2284 | 6.15733 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,980.09 | 8,980.09 | 0.34610 | 1.28083 | 0.50821 | 9,370.94 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.19693 | 7.57312 | 81.3648 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,031.5 | 15,031.5 | 0.97881 | 0.67718 | 25.1216 | 15,282.9 |
| Vendor | 0.24676 | 9.26180 | 4.31599 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,410.49 | 6,410.49 | 0.24721 | 0.91488 | 6.03720 | 6,695.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.67844 | 1.38209 | 14.8491 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,488.64 | 2,488.64 | 0.16205 | 0.11211 | 4.15916 | 2,530.26 |
| Vendor | 0.04503 | 1.69028 | 0.78767 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,061.33 | 1,061.33 | 0.04093 | 0.15147 | 0.99953 | 1,108.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.02988 | 9.39093 | 12.9379 | 0.02340 | 0.33657 | — | 0.33657 | 0.30965 | — | 0.30965 | — | 2,397.08 | 2,397.08 | 0.09724 | 0.01945 | — | 2,405.30 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73563 | 6.70781 | 9.24139 | 0.01671 | 0.24041 | — | 0.24041 | 0.22118 | — | 0.22118 | — | 1,712.20 | 1,712.20 | 0.06945 | 0.01389 | — | 1,718.07 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13425 | 1.22418 | 1.68655 | 0.00305 | 0.04387 | — | 0.04387 | 0.04036 | — | 0.04036 | — | 283.474 | 283.474 | 0.01150 | 0.00230 | — | 284.447 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.11.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 13.2276 | 8.98780 | 125.812 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 22,218.3 | 22,218.3 | 1.22958 | 0.87767 | 81.3966 | 22,592.0 |
| Vendor | 0.36637 | 12.4944 | 6.00090 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,970.79 | 8,970.79 | 0.34610 | 1.28083 | 19.5533 | 9,380.69 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.9461 | 11.4800 | 119.194 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,945.8 | 20,945.8 | 1.44072 | 0.94805 | 2.11593 | 21,266.5 |
| Vendor | 0.33502 | 13.2284 | 6.15733 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,980.09 | 8,980.09 | 0.34610 | 1.28083 | 0.50821 | 9,370.94 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 9.19693 | 7.57312 | 81.3648 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 15,031.5 | 15,031.5 | 0.97881 | 0.67718 | 25.1216 | 15,282.9 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.24676 | 9.26180 | 4.31599 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,410.49 | 6,410.49 | 0.24721 | 0.91488 | 6.03720 | 6,695.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.67844 | 1.38209 | 14.8491 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,488.64 | 2,488.64 | 0.16205 | 0.11211 | 4.15916 | 2,530.26 |
| Vendor | 0.04503 | 1.69028 | 0.78767 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,061.33 | 1,061.33 | 0.04093 | 0.15147 | 0.99953 | 1,108.49 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.12. Building Construction (2028)

### 3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.8757 | 8.18052 | 117.599 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,814.4 | 21,814.4 | 1.22958 | 0.87767 | 74.8201 | 22,181.5 |
| Vendor | 0.35592 | 11.9802 | 5.64404 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,746.30 | 8,746.30 | 0.34610 | 1.27038 | 17.3908 | 9,150.92 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.5942 | 10.6727 | 112.135 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,566.9 | 20,566.9 | 0.77420 | 0.94805 | 1.93484 | 20,870.7 |
| Vendor | 0.33502 | 12.6511 | 5.84258 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,756.06 | 8,756.06 | 0.34610 | 1.28083 | 0.45144 | 9,146.85 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.86926 | 7.01566 | 76.3067 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 14,800.4 | 14,800.4 | 0.45370 | 0.67903 | 23.1424 | 15,037.3 |
| Vendor | 0.24744 | 8.87373 | 4.10238 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,267.38 | 6,267.38 | 0.24789 | 0.91739 | 5.38254 | 6,552.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61864 | 1.28036 | 13.9260 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,450.38 | 2,450.38 | 0.07511 | 0.11242 | 3.83149 | 2,489.59 |
| Vendor | 0.04516 | 1.61946 | 0.74868 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,037.64 | 1,037.64 | 0.04104 | 0.15188 | 0.89114 | 1,084.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.99143 | 8.92495 | 12.9352 | 0.02340 | 0.30024 | — | 0.30024 | 0.27622 | — | 0.27622 | — | 2,397.46 | 2,397.46 | 0.09725 | 0.01945 | — | 2,405.68 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.71011 | 6.39243 | 9.26478 | 0.01676 | 0.21504 | — | 0.21504 | 0.19784 | — | 0.19784 | — | 1,717.16 | 1,717.16 | 0.06966 | 0.01393 | — | 1,723.05 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12959 | 1.16662 | 1.69082 | 0.00306 | 0.03925 | — | 0.03925 | 0.03611 | — | 0.03611 | — | 284.296 | 284.296 | 0.01153 | 0.00231 | — | 285.271 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.12.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.8757 | 8.18052 | 117.599 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,814.4 | 21,814.4 | 1.22958 | 0.87767 | 74.8201 | 22,181.5 |
| Vendor | 0.35592 | 11.9802 | 5.64404 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,746.30 | 8,746.30 | 0.34610 | 1.27038 | 17.3908 | 9,150.92 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.5942 | 10.6727 | 112.135 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,566.9 | 20,566.9 | 0.77420 | 0.94805 | 1.93484 | 20,870.7 |
| Vendor | 0.33502 | 12.6511 | 5.84258 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,756.06 | 8,756.06 | 0.34610 | 1.28083 | 0.45144 | 9,146.85 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.86926 | 7.01566 | 76.3067 | 0.00000 | 0.00000 | 15.0282 | 15.0282 | 0.00000 | 3.51835 | 3.51835 | — | 14,800.4 | 14,800.4 | 0.45370 | 0.67903 | 23.1424 | 15,037.3 |
| Vendor | 0.24744 | 8.87373 | 4.10238 | 0.04513 | 0.09026 | 1.69155 | 1.78181 | 0.09026 | 0.46802 | 0.55828 | — | 6,267.38 | 6,267.38 | 0.24789 | 0.91739 | 5.38254 | 6,552.34 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61864 | 1.28036 | 13.9260 | 0.00000 | 0.00000 | 2.74265 | 2.74265 | 0.00000 | 0.64210 | 0.64210 | — | 2,450.38 | 2,450.38 | 0.07511 | 0.11242 | 3.83149 | 2,489.59 |
| Vendor | 0.04516 | 1.61946 | 0.74868 | 0.00824 | 0.01647 | 0.30871 | 0.32518 | 0.01647 | 0.08541 | 0.10189 | — | 1,037.64 | 1,037.64 | 0.04104 | 0.15188 | 0.89114 | 1,084.81 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.13. Building Construction (2029)

### 3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.3127 | 7.37323 | 110.052 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,428.1 | 21,428.1 | 0.56306 | 0.87767 | 68.3388 | 21,772.1 |
| Vendor | 0.35592 | 11.4450 | 5.35019 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,500.82 | 8,500.82 | 0.33565 | 1.20737 | 15.4084 | 8,884.41 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9607 | 9.86546 | 104.410 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,205.0 | 20,205.0 | 0.70382 | 0.94805 | 1.77281 | 20,506.9 |
| Vendor | 0.32457 | 12.0739 | 5.53829 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,510.95 | 8,510.95 | 0.33565 | 1.21782 | 0.39918 | 8,882.65 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.49311 | 6.41986 | 71.3579 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,500.1 | 14,500.1 | 0.45246 | 0.67718 | 21.1048 | 14,734.3 |
| Vendor | 0.24676 | 8.42970 | 3.88874 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,075.02 | 6,075.02 | 0.23975 | 0.86241 | 4.74995 | 6,342.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.54999 | 1.17162 | 13.0228 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,400.66 | 2,400.66 | 0.07491 | 0.11211 | 3.49415 | 2,439.44 |
| Vendor | 0.04503 | 1.53842 | 0.70970 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,005.79 | 1,005.79 | 0.03969 | 0.14278 | 0.78641 | 1,050.12 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.96514 | 8.58166 | 12.9012 | 0.02340 | 0.27564 | — | 0.27564 | 0.25359 | — | 0.25359 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68938 | 6.12975 | 9.21517 | 0.01671 | 0.19689 | — | 0.19689 | 0.18114 | — | 0.18114 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12581 | 1.11868 | 1.68177 | 0.00305 | 0.03593 | — | 0.03593 | 0.03306 | — | 0.03306 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.13.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 12.3127 | 7.37323 | 110.052 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,428.1 | 21,428.1 | 0.56306 | 0.87767 | 68.3388 | 21,772.1 |
| Vendor | 0.35592 | 11.4450 | 5.35019 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,500.82 | 8,500.82 | 0.33565 | 1.20737 | 15.4084 | 8,884.41 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.9607 | 9.86546 | 104.410 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,205.0 | 20,205.0 | 0.70382 | 0.94805 | 1.77281 | 20,506.9 |
| Vendor | 0.32457 | 12.0739 | 5.53829 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,510.95 | 8,510.95 | 0.33565 | 1.21782 | 0.39918 | 8,882.65 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.49311 | 6.41986 | 71.3579 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,500.1 | 14,500.1 | 0.45246 | 0.67718 | 21.1048 | 14,734.3 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.24676 | 8.42970 | 3.88874 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 6,075.02 | 6,075.02 | 0.23975 | 0.86241 | 4.74995 | 6,342.76 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.54999 | 1.17162 | 13.0228 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,400.66 | 2,400.66 | 0.07491 | 0.11211 | 3.49415 | 2,439.44 |
| Vendor | 0.04503 | 1.53842 | 0.70970 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 1,005.79 | 1,005.79 | 0.03969 | 0.14278 | 0.78641 | 1,050.12 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.14. Building Construction (2030)

### 3.14.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6792 | 6.63633 | 103.312 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,061.0 | 21,061.0 | 0.49267 | 0.87767 | 62.1436 | 21,397.0 |
| Vendor | 0.34547 | 10.9938 | 5.12980 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,240.29 | 8,240.29 | 0.27264 | 1.20737 | 13.5161 | 8,620.42 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6088 | 9.05818 | 98.0881 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,860.9 | 19,860.9 | 0.70382 | 0.94805 | 1.61078 | 20,162.7 |
| Vendor | 0.32457 | 11.6227 | 5.30745 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,250.78 | 8,250.78 | 0.27264 | 1.20737 | 0.35142 | 8,617.75 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.14120 | 5.84323 | 66.6177 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,253.4 | 14,253.4 | 0.40218 | 0.62690 | 19.1986 | 14,469.5 |
| Vendor | 0.24676 | 8.11486 | 3.72386 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 5,889.07 | 5,889.07 | 0.19474 | 0.86241 | 4.17713 | 6,155.11 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.48577 | 1.06639 | 12.1577 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,359.82 | 2,359.82 | 0.06659 | 0.10379 | 3.17855 | 2,395.59 |
| Vendor | 0.04503 | 1.48096 | 0.67960 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 975.002 | 975.002 | 0.03224 | 0.14278 | 0.69157 | 1,019.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.94034 | 8.39196 | 12.8848 | 0.02340 | 0.26012 | — | 0.26012 | 0.23931 | — | 0.23931 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67167 | 5.99426 | 9.20340 | 0.01671 | 0.18580 | — | 0.18580 | 0.17093 | — | 0.17093 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12258 | 1.09395 | 1.67962 | 0.00305 | 0.03391 | — | 0.03391 | 0.03120 | — | 0.03120 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.14.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6792 | 6.63633 | 103.312 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 21,061.0 | 21,061.0 | 0.49267 | 0.87767 | 62.1436 | 21,397.0 |
| Vendor | 0.34547 | 10.9938 | 5.12980 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,240.29 | 8,240.29 | 0.27264 | 1.20737 | 13.5161 | 8,620.42 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.6088 | 9.05818 | 98.0881 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,860.9 | 19,860.9 | 0.70382 | 0.94805 | 1.61078 | 20,162.7 |
| Vendor | 0.32457 | 11.6227 | 5.30745 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.12602 | 0.66238 | 0.78841 | — | 8,250.78 | 8,250.78 | 0.27264 | 1.20737 | 0.35142 | 8,617.75 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 8.14120 | 5.84323 | 66.6177 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,253.4 | 14,253.4 | 0.40218 | 0.62690 | 19.1986 | 14,469.5 |
| Vendor | 0.24676 | 8.11486 | 3.72386 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.09002 | 0.46674 | 0.55676 | — | 5,889.07 | 5,889.07 | 0.19474 | 0.86241 | 4.17713 | 6,155.11 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.48577 | 1.06639 | 12.1577 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,359.82 | 2,359.82 | 0.06659 | 0.10379 | 3.17855 | 2,395.59 |
| Vendor | 0.04503 | 1.48096 | 0.67960 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.01643 | 0.08518 | 0.10161 | — | 975.002 | 975.002 | 0.03224 | 0.14278 | 0.69157 | 1,019.05 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.15. Building Construction (2031)

### 3.15.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.1865 | 5.82905 | 96.5017 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,718.2 | 20,718.2 | 0.49267 | 0.87767 | 56.3295 | 21,048.4 |
| Vendor | 0.28246 | 10.5426 | 4.90942 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,975.28 | 7,975.28 | 0.27264 | 1.14436 | 11.7140 | 8,334.83 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.9754 | 8.32128 | 91.1702 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,538.7 | 19,538.7 | 0.63344 | 0.94805 | 1.45828 | 19,838.5 |
| Vendor | 0.26156 | 11.1819 | 5.08706 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,986.04 | 7,986.04 | 0.27264 | 1.14436 | 0.30456 | 8,334.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.73902 | 5.31687 | 62.4038 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,022.3 | 14,022.3 | 0.40218 | 0.62690 | 17.3604 | 14,236.5 |
| Vendor | 0.19429 | 7.79256 | 3.56644 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.04501 | 0.46674 | 0.51175 | — | 5,699.85 | 5,699.85 | 0.19474 | 0.81740 | 3.62361 | 5,951.93 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.41237 | 0.97033 | 11.3887 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,321.55 | 2,321.55 | 0.06659 | 0.10379 | 2.87422 | 2,357.02 |
| Vendor | 0.03546 | 1.42214 | 0.65088 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.00821 | 0.08518 | 0.09339 | — | 943.676 | 943.676 | 0.03224 | 0.13533 | 0.59993 | 985.410 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.91839 | 8.11856 | 12.8454 | 0.02340 | 0.24323 | — | 0.24323 | 0.22377 | — | 0.22377 | — | 2,396.83 | 2,396.83 | 0.09723 | 0.01945 | — | 2,405.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65599 | 5.79897 | 9.17527 | 0.01671 | 0.17374 | — | 0.17374 | 0.15984 | — | 0.15984 | — | 1,712.02 | 1,712.02 | 0.06945 | 0.01389 | — | 1,717.90 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11972 | 1.05831 | 1.67449 | 0.00305 | 0.03171 | — | 0.03171 | 0.02917 | — | 0.02917 | — | 283.445 | 283.445 | 0.01150 | 0.00230 | — | 284.418 |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.15.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 11.1865 | 5.82905 | 96.5017 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 20,718.2 | 20,718.2 | 0.49267 | 0.87767 | 56.3295 | 21,048.4 |
| Vendor | 0.28246 | 10.5426 | 4.90942 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,975.28 | 7,975.28 | 0.27264 | 1.14436 | 11.7140 | 8,334.83 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 10.9754 | 8.32128 | 91.1702 | 0.00000 | 0.00000 | 21.3606 | 21.3606 | 0.00000 | 5.00689 | 5.00689 | — | 19,538.7 | 19,538.7 | 0.63344 | 0.94805 | 1.45828 | 19,838.5 |
| Vendor | 0.26156 | 11.1819 | 5.08706 | 0.06301 | 0.12602 | 2.39749 | 2.52351 | 0.06301 | 0.66238 | 0.72540 | — | 7,986.04 | 7,986.04 | 0.27264 | 1.14436 | 0.30456 | 8,334.18 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 7.73902 | 5.31687 | 62.4038 | 0.00000 | 0.00000 | 14.9871 | 14.9871 | 0.00000 | 3.50874 | 3.50874 | — | 14,022.3 | 14,022.3 | 0.40218 | 0.62690 | 17.3604 | 14,236.5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.19429 | 7.79256 | 3.56644 | 0.04501 | 0.09002 | 1.68693 | 1.77694 | 0.04501 | 0.46674 | 0.51175 | — | 5,699.85 | 5,699.85 | 0.19474 | 0.81740 | 3.62361 | 5,951.93 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.41237 | 0.97033 | 11.3887 | 0.00000 | 0.00000 | 2.73515 | 2.73515 | 0.00000 | 0.64035 | 0.64035 | — | 2,321.55 | 2,321.55 | 0.06659 | 0.10379 | 2.87422 | 2,357.02 |
| Vendor | 0.03546 | 1.42214 | 0.65088 | 0.00821 | 0.01643 | 0.30786 | 0.32429 | 0.00821 | 0.08518 | 0.09339 | — | 943.676 | 943.676 | 0.03224 | 0.13533 | 0.59993 | 985.410 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.16. Paving (2028)

### 3.16.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26552 | 2.56801 | 3.83984 | 0.00541 | 0.09902 | — | 0.09902 | 0.09109 | — | 0.09109 | — | 585.487 | 585.487 | 0.02375 | 0.00475 | — | 587.496 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04846 | 0.46866 | 0.70077 | 0.00099 | 0.01807 | — | 0.01807 | 0.01662 | — | 0.01662 | — | 96.9341 | 96.9341 | 0.00393 | 0.00079 | — | 97.2667 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02254 | 0.01783 | 0.19396 | 0.00000 | 0.00000 | 0.03820 | 0.03820 | 0.00000 | 0.00894 | 0.00894 | — | 37.6203 | 37.6203 | 0.00115 | 0.00173 | 0.05882 | 38.2223 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00411 | 0.00325 | 0.03540 | 0.00000 | 0.00000 | 0.00697 | 0.00697 | 0.00000 | 0.00163 | 0.00163 | — | 6.22846 | 6.22846 | 0.00019 | 0.00029 | 0.00974 | 6.32813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.68524 | 6.62754 | 9.90989 | 0.01395 | 0.25554 | — | 0.25554 | 0.23510 | — | 0.23510 | — | 1,511.03 | 1,511.03 | 0.06129 | 0.01226 | — | 1,516.22 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26552 | 2.56801 | 3.83984 | 0.00541 | 0.09902 | — | 0.09902 | 0.09109 | — | 0.09109 | — | 585.487 | 585.487 | 0.02375 | 0.00475 | — | 587.496 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04846 | 0.46866 | 0.70077 | 0.00099 | 0.01807 | — | 0.01807 | 0.01662 | — | 0.01662 | — | 96.9341 | 96.9341 | 0.00393 | 0.00079 | — | 97.2667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.16.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06050 | 0.03844 | 0.55254 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 102.496 | 102.496 | 0.00578 | 0.00412 | 0.35155 | 104.221 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05917 | 0.05015 | 0.52687 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 96.6344 | 96.6344 | 0.00364 | 0.00445 | 0.00909 | 98.0619 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02254 | 0.01783 | 0.19396 | 0.00000 | 0.00000 | 0.03820 | 0.03820 | 0.00000 | 0.00894 | 0.00894 | — | 37.6203 | 37.6203 | 0.00115 | 0.00173 | 0.05882 | 38.2223 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00411 | 0.00325 | 0.03540 | 0.00000 | 0.00000 | 0.00697 | 0.00697 | 0.00000 | 0.00163 | 0.00163 | — | 6.22846 | 6.22846 | 0.00019 | 0.00029 | 0.00974 | 6.32813 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.17. Paving (2029)

## 3.17.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34750 | 3.33651 | 5.12419 | 0.00721 | 0.12350 | — | 0.12350 | 0.11362 | — | 0.11362 | — | 780.440 | 780.440 | 0.03166 | 0.00633 | — | 783.119 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06342 | 0.60891 | 0.93516 | 0.00132 | 0.02254 | — | 0.02254 | 0.02074 | — | 0.02074 | — | 129.211 | 129.211 | 0.00524 | 0.00105 | — | 129.654 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02886 | 0.02182 | 0.24250 | 0.00000 | 0.00000 | 0.05093 | 0.05093 | 0.00000 | 0.01192 | 0.01192 | — | 49.2772 | 49.2772 | 0.00154 | 0.00230 | 0.07172 | 50.0732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00527 | 0.00398 | 0.04426 | 0.00000 | 0.00000 | 0.00930 | 0.00930 | 0.00000 | 0.00218 | 0.00218 | — | 8.15840 | 8.15840 | 0.00025 | 0.00038 | 0.01187 | 8.29018 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67262 | 6.45817 | 9.91841 | 0.01395 | 0.23904 | — | 0.23904 | 0.21992 | — | 0.21992 | — | 1,510.63 | 1,510.63 | 0.06128 | 0.01226 | — | 1,515.81 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34750 | 3.33651 | 5.12419 | 0.00721 | 0.12350 | — | 0.12350 | 0.11362 | — | 0.11362 | — | 780.440 | 780.440 | 0.03166 | 0.00633 | — | 783.119 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06342 | 0.60891 | 0.93516 | 0.00132 | 0.02254 | — | 0.02254 | 0.02074 | — | 0.02074 | — | 129.211 | 129.211 | 0.00524 | 0.00105 | — | 129.654 |
| Paving | 0.00000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.17.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05785 | 0.03464 | 0.51708 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 100.681 | 100.681 | 0.00265 | 0.00412 | 0.32109 | 102.297 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05620 | 0.04635 | 0.49057 | 0.00000 | 0.00000 | 0.10036 | 0.10036 | 0.00000 | 0.02353 | 0.02353 | — | 94.9342 | 94.9342 | 0.00331 | 0.00445 | 0.00833 | 96.3527 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02886 | 0.02182 | 0.24250 | 0.00000 | 0.00000 | 0.05093 | 0.05093 | 0.00000 | 0.01192 | 0.01192 | — | 49.2772 | 49.2772 | 0.00154 | 0.00230 | 0.07172 | 50.0732 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00527 | 0.00398 | 0.04426 | 0.00000 | 0.00000 | 0.00930 | 0.00930 | 0.00000 | 0.00218 | 0.00218 | — | 8.15840 | 8.15840 | 0.00025 | 0.00038 | 0.01187 | 8.29018 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.18. Architectural Coating (2029)

### 3.18.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02003 | 0.15541 | 0.21764 | 0.00034 | 0.00251 | — | 0.00251 | 0.00231 | — | 0.00231 | — | 26.1271 | 26.1271 | 0.00106 | 0.00021 | — | 26.2168 |
| Architectural Coatings | 74.1420 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00366 | 0.02836 | 0.03972 | 0.00006 | 0.00046 | — | 0.00046 | 0.00042 | — | 0.00042 | — | 4.32565 | 4.32565 | 0.00018 | 0.00004 | — | 4.34049 |
| Architectural Coatings | 13.5309 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.46253 | 1.47465 | 22.0103 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,285.62 | 4,285.62 | 0.11261 | 0.17553 | 13.6678 | 4,354.41 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39215 | 1.97309 | 20.8820 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,041.01 | 4,041.01 | 0.14076 | 0.18961 | 0.35456 | 4,101.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.46538 | 0.35177 | 3.91002 | 0.00000 | 0.00000 | 0.82121 | 0.82121 | 0.00000 | 0.19226 | 0.19226 | — | 794.528 | 794.528 | 0.02479 | 0.03711 | 1.15643 | 807.361 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08493 | 0.06420 | 0.71358 | 0.00000 | 0.00000 | 0.14987 | 0.14987 | 0.00000 | 0.03509 | 0.03509 | — | 131.543 | 131.543 | 0.00410 | 0.00614 | 0.19146 | 133.668 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10236 | 0.79416 | 1.11216 | 0.00173 | 0.01284 | — | 0.01284 | 0.01181 | — | 0.01181 | — | 133.510 | 133.510 | 0.00542 | 0.00108 | — | 133.968 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02003 | 0.15541 | 0.21764 | 0.00034 | 0.00251 | — | 0.00251 | 0.00231 | — | 0.00231 | — | 26.1271 | 26.1271 | 0.00106 | 0.00021 | — | 26.2168 |
| Architectural Coatings | 74.1420 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00366 | 0.02836 | 0.03972 | 0.00006 | 0.00046 | — | 0.00046 | 0.00042 | — | 0.00042 | — | 4.32565 | 4.32565 | 0.00018 | 0.00004 | — | 4.34049 |
| Architectural Coatings | 13.5309 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.18.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.46253 | 1.47465 | 22.0103 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,285.62 | 4,285.62 | 0.11261 | 0.17553 | 13.6678 | 4,354.41 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.39215 | 1.97309 | 20.8820 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,041.01 | 4,041.01 | 0.14076 | 0.18961 | 0.35456 | 4,101.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.46538 | 0.35177 | 3.91002 | 0.00000 | 0.00000 | 0.82121 | 0.82121 | 0.00000 | 0.19226 | 0.19226 | — | 794.528 | 794.528 | 0.02479 | 0.03711 | 1.15643 | 807.361 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08493 | 0.06420 | 0.71358 | 0.00000 | 0.00000 | 0.14987 | 0.14987 | 0.00000 | 0.03509 | 0.03509 | — | 131.543 | 131.543 | 0.00410 | 0.00614 | 0.19146 | 133.668 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19. Architectural Coating (2030)

## 3.19.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06989 | 0.55745 | 0.78651 | 0.00123 | 0.00779 | — | 0.00779 | 0.00717 | — | 0.00717 | — | 94.8438 | 94.8438 | 0.00385 | 0.00077 | — | 95.1693 |
| Architectural Coatings | 269.135 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01276 | 0.10173 | 0.14354 | 0.00022 | 0.00142 | — | 0.00142 | 0.00131 | — | 0.00131 | — | 15.7025 | 15.7025 | 0.00064 | 0.00013 | — | 15.7564 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 49.1172 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.33584 | 1.32727 | 20.6624 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,212.19 | 4,212.19 | 0.09853 | 0.17553 | 12.4287 | 4,279.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.32177 | 1.81164 | 19.6176 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 3,972.19 | 3,972.19 | 0.14076 | 0.18961 | 0.32216 | 4,032.53 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61932 | 1.16224 | 13.2505 | 0.00000 | 0.00000 | 2.98100 | 2.98100 | 0.00000 | 0.69790 | 0.69790 | — | 2,835.06 | 2,835.06 | 0.08000 | 0.12469 | 3.81868 | 2,878.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.29553 | 0.21211 | 2.41822 | 0.00000 | 0.00000 | 0.54403 | 0.54403 | 0.00000 | 0.12737 | 0.12737 | — | 469.377 | 469.377 | 0.01324 | 0.02064 | 0.63223 | 476.492 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 3.19.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09839 | 0.78473 | 1.10719 | 0.00173 | 0.01097 | — | 0.01097 | 0.01009 | — | 0.01009 | — | 133.513 | 133.513 | 0.00542 | 0.00108 | — | 133.971 |
| Architectural Coatings | 378.865 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06989 | 0.55745 | 0.78651 | 0.00123 | 0.00779 | — | 0.00779 | 0.00717 | — | 0.00717 | — | 94.8438 | 94.8438 | 0.00385 | 0.00077 | — | 95.1693 |
| Architectural Coatings | 269.135 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01276 | 0.10173 | 0.14354 | 0.00022 | 0.00142 | — | 0.00142 | 0.00131 | — | 0.00131 | — | 15.7025 | 15.7025 | 0.00064 | 0.00013 | — | 15.7564 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 49.1172 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 3.19.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.33584 | 1.32727 | 20.6624 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 4,212.19 | 4,212.19 | 0.09853 | 0.17553 | 12.4287 | 4,279.39 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 2.32177 | 1.81164 | 19.6176 | 0.00000 | 0.00000 | 4.27212 | 4.27212 | 0.00000 | 1.00138 | 1.00138 | — | 3,972.19 | 3,972.19 | 0.14076 | 0.18961 | 0.32216 | 4,032.53 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.61932 | 1.16224 | 13.2505 | 0.00000 | 0.00000 | 2.98100 | 2.98100 | 0.00000 | 0.69790 | 0.69790 | — | 2,835.06 | 2,835.06 | 0.08000 | 0.12469 | 3.81868 | 2,878.04 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.29553 | 0.21211 | 2.41822 | 0.00000 | 0.00000 | 0.54403 | 0.54403 | 0.00000 | 0.12737 | 0.12737 | — | 469.377 | 469.377 | 0.01324 | 0.02064 | 0.63223 | 476.492 |
| Vendor | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Hauling | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,642.9 | 16,642.9 | 1.41979 | 0.17210 | — | 16,729.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 2,755.42 | 2,755.42 | 0.23506 | 0.02849 | — | 2,769.79 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,755.42 | 2,755.42 | 0.23506 | 0.02849 | — | 2,769.79 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16,646.3 | 16,646.3 | 1.42008 | 0.17213 | — | 16,733.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,755.99 | 2,755.99 | 0.23511 | 0.02850 | — | 2,770.36 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Total | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Total | 2.63524 | 45.0387 | 19.1654 | 0.28748 | 3.64143 | — | 3.64143 | 3.64143 | — | 3.64143 | — | 57,168.8 | 57,168.8 | 5.05941 | 0.10765 | — | 57,327.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 9,464.95 | 9,464.95 | 0.83764 | 0.01782 | — | 9,491.20 |
| Total | 0.48093 | 8.21956 | 3.49769 | 0.05247 | 0.66456 | — | 0.66456 | 0.66456 | — | 0.66456 | — | 9,464.95 | 9,464.95 | 0.83764 | 0.01782 | — | 9,491.20 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Total | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 22.6064 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | — | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 18.3560 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.83861 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 2.82581 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | — | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 22.6064 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | — | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Total | 133.262 | 2.45881 | 251.018 | 0.01091 | 0.12648 | — | 0.12648 | 0.09567 | — | 0.09567 | 0.00000 | 672.581 | 672.581 | 0.02811 | 0.00558 | — | 674.947 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 100.581 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 10.0746 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 110.655 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | — | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Consumer Products | 18.3560 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.83861 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landsca Equipment | 2.82581 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | — | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |
| Total | 23.0204 | 0.30735 | 31.3772 | 0.00136 | 0.01581 | — | 0.01581 | 0.01196 | — | 0.01196 | 0.00000 | 76.2695 | 76.2695 | 0.00319 | 0.00063 | — | 76.5378 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Total | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Total | — | — | — | — | — | — | — | — | — | — | 355.218 | 1,062.96 | 1,418.17 | 36.5142 | 0.87640 | — | 2,592.20 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |
| Total | — | — | — | — | — | — | — | — | — | — | 58.8103 | 175.984 | 234.795 | 6.04534 | 0.14510 | — | 429.168 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Total | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,767.06 | 0.00000 | 1,767.06 | 176.611 | 0.00000 | — | 6,182.35 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/Townhous | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |
| Total | — | — | — | — | — | — | — | — | — | — | 292.557 | 0.00000 | 292.557 | 29.2400 | 0.00000 | — | 1,023.56 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 33.6617 | 33.6617 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.57308 | 5.57308 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/2/2023 | 2/26/2024 | 5.00000 | 300.000 | — |
| Site Preparation | Site Preparation | 2/27/2024 | 11/5/2024 | 5.00000 | 180.000 | — |
| Grading | Grading | 11/6/2024 | 8/19/2026 | 5.00000 | 465.000 | — |
| Building Construction | Building Construction | 1/2/2023 | 12/31/2031 | 5.00000 | 2,348.00 | — |
| Paving | Paving | 6/17/2028 | 9/21/2029 | 5.00000 | 330.000 | — |
| Architectural Coating | Architectural Coating | 9/23/2029 | 12/29/2030 | 5.00000 | 330.000 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Average | 1.000000 | 8.00000 | 33.0000 | 0.73000 |
| Demolition | Excavators | Diesel | Average | 3.00000 | 8.00000 | 36.0000 | 0.38000 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00000 | 8.00000 | 367.000 | 0.40000 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00000 | 8.00000 | 84.0000 | 0.37000 |
| Grading | Excavators | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Grading | Graders | Diesel | Average | 1.000000 | 8.00000 | 148.000 | 0.41000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Rubber Tired Dozers | Diesel | Average | 1.000000 | 8.00000 | 367.000 | 0.40000 |
| Grading | Scrapers | Diesel | Average | 2.00000 | 8.00000 | 423.000 | 0.48000 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00000 | 8.00000 | 84.0000 | 0.37000 |
| Building Construction | Cranes | Diesel | Average | 1.000000 | 7.00000 | 367.000 | 0.29000 |
| Building Construction | Forklifts | Diesel | Average | 3.00000 | 8.00000 | 82.0000 | 0.20000 |
| Building Construction | Generator Sets | Diesel | Average | 1.000000 | 8.00000 | 14.0000 | 0.74000 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00000 | 7.00000 | 84.0000 | 0.37000 |
| Building Construction | Welders | Diesel | Average | 1.000000 | 8.00000 | 46.0000 | 0.45000 |
| Paving | Pavers | Diesel | Average | 2.00000 | 8.00000 | 81.0000 | 0.42000 |
| Paving | Paving Equipment | Diesel | Average | 2.00000 | 8.00000 | 89.0000 | 0.36000 |
| Paving | Rollers | Diesel | Average | 2.00000 | 8.00000 | 36.0000 | 0.38000 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.000000 | 6.00000 | 37.0000 | 0.48000 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |

| | | | | |
|---|---|---|---|---|
| Grading | Hauling | 116.856 | 20.0000 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 3,192.48 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 473.995 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 638.496 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 6.03000 | HHDT,MHDT |
| Demolition | Hauling | 0.00000 | 20.0000 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | Worker | 17.5000 | 9.47000 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 6.03000 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00000 | 20.0000 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | Worker | 20.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 6.03000 | HHDT,MHDT |
| Grading | Hauling | 116.856 | 20.0000 | HHDT |

| | | | | |
|---|---|---|---|---|
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | Worker | 3,192.48 | 9.47000 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 473.995 | 6.03000 | HHDT,MHDT |
| Building Construction | Hauling | 0.00000 | 20.0000 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15.0000 | 9.47000 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 6.03000 | HHDT,MHDT |
| Paving | Hauling | 0.00000 | 20.0000 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 638.496 | 9.47000 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 6.03000 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00000 | 20.0000 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Apply dust suppressants to unpaved roads | 84% | 84% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 9,517,581 | 3,172,527 | 0.00000 | 0.00000 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Ton of Debris) | Material Exported (Ton of Debris) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00000 | 0.00000 | 0.00000 | — | 0.00000 |
| Site Preparation | 0.00000 | 0.00000 | 135.000 | 0.00000 | 0.00000 |
| Grading | 365,330 | 184,200 | 699.000 | 0.00000 | 0.00000 |
| Paving | 0.00000 | 0.00000 | 0.00000 | 0.00000 | — |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Condo/Townhouse | — | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2025 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2026 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2027 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2028 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2029 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2030 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2031 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

| | | | | |
|---|---|---|---|---|
| 2023 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |
| 2024 | 0.00000 | 9.99000 | 0.03300 | 0.00400 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Condo/Townhouse | Wood Fireplaces | 0 | 0 |
| Condo/Townhouse | Gas Fireplaces | 4,434 | 4,434 |
| Condo/Townhouse | Propane Fireplaces | 0 | 0 |
| Condo/Townhouse | Electric Fireplaces | 0 | 0 |
| Condo/Townhouse | No Fireplaces | 0 | 0 |
| Condo/Townhouse | Conventional Wood Stoves | 0 | 0 |
| Condo/Townhouse | Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Non-Catalytic Wood Stoves | 0 | 0 |
| Condo/Townhouse | Pellet Wood Stoves | 0 | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 9,517,581 | 3,172,527 | 0.00000 | 0.00000 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00000 |
| Summer Days | day/yr | 250.000 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 15,703,685 | 386.830 | 0.0330 | 0.0040 | 178,382,036 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Condo/Townhouse | 15,706,910 | 386.830 | 0.0330 | 0.0040 | 0.00000 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 185,372,681 | 0.00000 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 185,372,681 | 0.00000 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 3,278.78 | 0.00000 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 3,278.78 | 0.00000 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088.00 | 0.00225 | 2.50000 | 2.50000 | 10.00000 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430.00 | 0.11538 | 0.60000 | 0.00000 | 1.000000 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 6.75000 | annual days of extreme heat |
| Extreme Precipitation | 4.10000 | annual days with precipitation above 20 mm |

| | | |
|---|---|---|
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 31.3300 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 0 | 0 | 0 | N/A |
| Wildfire | 0 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 0 | 0 | 0 | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | 1 | 1 | 1 | 2 |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 13.6154 |
| AQ-PM | 2.92470 |
| AQ-DPM | 26.3846 |
| Drinking Water | 38.7161 |
| Lead Risk Housing | 56.6982 |
| Pesticides | 0.00000 |
| Toxic Releases | 0.53763 |
| Traffic | 27.0500 |
| Effect Indicators | — |

| | |
|---|---|
| CleanUp Sites | 82.9787 |
| Groundwater | 87.4813 |
| Haz Waste Facilities/Generators | 30.5890 |
| Impaired Water Bodies | 77.2995 |
| Solid Waste | 59.1753 |
| Sensitive Population | — |
| Asthma | 35.8549 |
| Cardio-vascular | 13.0982 |
| Low Birth Weights | 19.9256 |
| Socioeconomic Factor Indicators | — |
| Education | 24.1205 |
| Housing | 63.9670 |
| Linguistic | 24.7665 |
| Poverty | 26.6709 |
| Unemployment | 37.7147 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 64.9557295 |
| Employed | 60.78532016 |
| Median HI | 46.47760811 |
| Education | — |
| Bachelor's or higher | 81.58603875 |
| High school enrollment | 100 |
| Preschool enrollment | 1.873476197 |
| Transportation | — |

| | |
|---|---|
| Auto Access | 57.21801617 |
| Active commuting | 87.89939689 |
| Social | — |
| 2-parent households | 65.78981137 |
| Voting | 70.98678301 |
| Neighborhood | — |
| Alcohol availability | 40.65186706 |
| Park access | 81.35506224 |
| Retail density | 93.41716925 |
| Supermarket access | 64.09598358 |
| Tree canopy | 81.52187861 |
| Housing | — |
| Homeownership | 12.72937251 |
| Housing habitability | 27.37071731 |
| Low-inc homeowner severe housing cost burden | 19.88964455 |
| Low-inc renter severe housing cost burden | 39.67663288 |
| Uncrowded housing | 84.29359682 |
| Health Outcomes | — |
| Insured adults | 64.90440139 |
| Arthritis | 0.0 |
| Asthma ER Admissions | 75.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 79.6 |

| | |
|---|---|
| Cognitively Disabled | 32.0 |
| Physically  Disabled | 36.0 |
| Heart Attack ER Admissions | 94.8 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 84.3 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 4.5 |
| SLR Inundation Area | 47.2 |
| Children | 88.7 |
| Elderly | 20.2 |
| English Speaking | 64.4 |
| Foreign-born | 44.0 |
| Outdoor Workers | 70.9 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 31.0 |
| Traffic Density | 1.4 |
| Traffic Access | 0.0 |
| Other Indices | — |
| Hardship | 20.0 |
| Other Decision Support | — |

| | |
|---|---|
| 2016 Voting | 74.8 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 22.0000 |
| Healthy Places Index Score for Project Location (b) | 67.0000 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | 3CE serves Monterey County for electricity |
| Construction: Construction Phases | Revised to fit in planning years of 2023-2031 |
| Construction: Dust From Material Movement | Based on CalEEMod suggested estimates |
| Construction: On-Road Fugitive Dust | Site are located adjacent to existing roadways and development. Accessible primarily from paved roads. |

| | |
|---|---|
| Operations: Vehicle Data | Mobile emissions calculated separately |

## 8.2. Project Characteristics

### 8.2.1. Project Details

| Model Parameter | Default Value | New Value |
|---|---|---|
| Electric Utility | Pacific Gas & Electric Company | Central Coast Community Energy |

## 8.4. Construction

### 8.4.1. Construction Phases

| Phase Type | Phase Name | Model Parameter | Default Value | New Value |
|---|---|---|---|---|
| Building Construction | Building Construction | Start Date | 8/20/2026 | 1/2/2023 |
| Building Construction | Building Construction | End Date | 6/16/2044 | 12/31/2031 |
| Building Construction | Building Construction | Work Days per Phase | 4,650.00 | 2,348.00 |
| Paving | Paving | Start Date | 6/17/2044 | 6/17/2028 |
| Paving | Paving | End Date | 9/22/2045 | 9/21/2029 |
| Architectural Coating | Architectural Coating | Start Date | 9/23/2045 | 9/23/2029 |
| Architectural Coating | Architectural Coating | End Date | 12/29/2046 | 12/29/2030 |

### 8.4.4. Dust from Material Movement

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Site Preparation | Material Imported | Ton of Debris | — | 0.00000 |
| Site Preparation | Material Exported | Ton of Debris | — | 0.00000 |
| Site Preparation | Total Acres Graded | acres | 270.000 | 135.000 |
| Grading | Material Imported | Ton of Debris | — | 365,330 |
| Grading | Material Exported | Ton of Debris | — | 184,200 |
| Grading | Total Acres Graded | acres | 1,395.00 | 699.000 |

### 8.4.7. On-Road Fugitive Dust

| Phase Name | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Demolition | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Demolition | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Site Preparation | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Grading | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Building Construction | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Paving | Hauling Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Worker Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Vendor Trip Paved | % | 52.0000 | 100.0000 |
| Architectural Coating | Hauling Trip Paved | % | 52.0000 | 100.0000 |

## 8.5. Operations

### 8.5.1. Mobile Sources

#### 8.5.1.1. Vehicle Data

| Land Use | Model Parameter | Units | Default Value | New Value |
|---|---|---|---|---|
| Condo/Townhouse | Weekday Trip Rate | size/day | 7.32000 | 0.00000 |

| | | | | |
|---|---|---|---|---|
| Condo/Townhouse | Saturday Trip Rate | size/day | 8.14000 | 0.00000 |
| Condo/Townhouse | Sunday Trip Rate | size/day | 6.28000 | 0.00000 |

# NOISE TECHNICAL MEMORANDUM

**To:** County of Monterey
**From:** Sharon Toland, AICP, Senior Technical Specialist, Harris & Associates
**RE:** **Noise Technical Memorandum for the County of Monterey Draft General Plan Housing Element Sixth Cycle (2023–2031) Update**
**Date:** January 14, 2025
**CC:** Darin Neufeld, AICP, Director, Environmental + Planning Consulting, and Elizabeth Kim, Senior Project Manager, Harris & Associates
**Att:** 1, FHWA Noise Prediction Model Results

## Introduction

This memorandum provides the results of Harris & Associates' analysis of the potential vehicle noise impacts from implementation of the County of Monterey General Plan Housing Element Sixth Cycle (2023–2031) Update (HEU6), as well as amending other components of the General Plan and other approvals as necessary to implement the HEU6 and comply with state law (project). The project area encompasses the unincorporated Monterey County (UMC), the geographic area overseen by the County and covered by the HEU6.

"HEU6" refers to the draft HEU6 document circulated for public review and submitted to the California Department of Housing and Community Development, while the "project" refers to HEU6 along with other components and related actions intended to implement HEU6.

For the purposes of this analysis, the following definitions are used herein:

- County of Monterey Government (County) – Represents Monterey County as the government entity responsible for the preparation of this Housing Element and its implementation.
- Unincorporated Monterey County (UMC) – Represents the geographic area overseen by the County as a government entity.
- Monterey County (Monterey County) – Represents the entire Monterey County geographic area, including incorporated and unincorporated communities.

Monterey County is on the central coast and consists of approximately 3,282 square miles of land. It is bounded by the Pacific Ocean to the west and San Benito County to the east. Monterey County is accessible by State Route (SR-) 1 and U.S. Route 101 from the north and south and SR-146 and SR-198 from the east. The project area includes 56 opportunity sites throughout Monterey County. Each opportunity site is assigned a number (e.g., Opportunity Site 1). Opportunity sites are spread among the County's nine Land Use Plan areas. These include the areas within the North County Inland Area Plan, North County Coastal Land Use Plan, Greater Salinas Area Plan, Greater Monterey Peninsula Area Plan, Ford Ord Master Plan, Toro Area Plan, Carmel Valley Master Plan, Carmel Area Land Use Plan, and Central Salinas Valley Area Plan.

The HEU6 includes the capacity for at least 5,897 residential units, comprising opportunity sites (4,434 units), pipeline sites (1,117 units), and accessory dwelling units (ADUs) (346 units). Pipeline sites are sites where housing

has been proposed and/or entitled, and where development is expected to receive a building permit or certificate of occupancy. ADUs would involve additional units on existing housing sites. For California Environmental Quality Act (CEQA) analysis, the operational traffic noise modeling included in this Noise Technical Memorandum evaluates the theoretical maximum total capacity of 12,497 new housing units on 56 opportunity sites, consistent with the assumptions of the vehicle miles traveled analysis.

The Federal Highway Administration (FHWA) Traffic Noise Prediction Model was used to estimate near-term and long-term traffic noise levels with and without project implementation. Traffic volumes and roadway characteristics with buildout of the project used in the FHWA Traffic Noise Prediction Model were obtained from Kimley-Horn (Kimley-Horn 2026).

## Noise Analysis Background

The California Department of Transportation (Caltrans) defines "noise" as sound that is loud, unpleasant, unexpected, or undesired. Sound pressure levels are quantified using a logarithmic ratio of actual sound pressures to a reference pressure squared, called "bels." A bel is typically divided into tenths, or decibels (dB). Sound pressure alone is not a reliable indicator of loudness because frequency (or pitch) also affects how receptors respond to sound. To account for the pitch of sounds and the corresponding sensitivity of human hearing to them, the raw sound pressure level is adjusted with a frequency-dependent A-weighting scale that is stated in units of decibels (dBA) (Caltrans 2013).

A receptor's response to a given noise may vary depending on the sound level, duration of exposure, character of the noise sources, time of day during which the noise is experienced, and activity affected by the noise. Activities most affected by noise include rest, relaxation, recreation, study, and communications. In consideration of these factors, different measures of noise exposure have been developed to quantify the extent of the effects from various noise levels. The Community Noise Equivalent Level (CNEL) is the average equivalent A-weighted sound level over a 24-hour period. This measurement applies weights to noise levels during evening and nighttime hours to compensate for the increased disturbance response of people at those times. CNEL is the equivalent sound level for a 24-hour period with a +5 dBA weighting applied to sound occurring between 7:00 p.m. and 10:00 p.m. and a +10 dBA weighting applied to sound occurring between 10:00 p.m. and 7:00 a.m.

The dB level of a sound decreases (or attenuates) as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level typically decreases by approximately 6 dBA for each doubling of distance from the source. Sound that originates from a linear (or "line") source, such as vehicular traffic, attenuates by approximately 3 dBA per doubling of distance. Other contributing factors that affect sound reception include ground absorption, natural topography that provides a natural barrier, meteorological conditions, and the presence of human-made obstacles, such as buildings and sound barriers (Caltrans 2013).

Noise-sensitive land uses include noise receptors (receivers) where an excessive amount of noise interferes with normal activities. Noise-sensitive land uses typically consist of residences, hotels, offices, places of worship, hospitals, schools, and libraries. The Monterey County General Plan (2010 General Plan) Safety Element identifies principal noise sources in Monterey County as transportation facilities, industrial and food-packing plants, mining operations, Laguna Seca Raceway, and Moss Landing Power Plant. Transportation-related noise sources include roadways, the Union Pacific Railroad Coast Line, and airports. Roadway noise sources providing north–south connections include SR-1 between the Cities of Marina and Monterey, and U.S. Route 101 between the Cities of Prunedale and Salinas, and Gonzales to Greenfield. Roadway noise sources providing east–west connections include SR-68 between the Cities of Monterey and Salinas and SR-156 between the Cities of Castroville and the U.S. Route 101 connection in Prunedale. Airport noise sources in Monterey County include the Monterey Regional Airport, Salinas Municipal Airport, Marina Municipal Airport, and Mesa Del Rey Airport (County of Monterey 2010).

# Regulatory Setting

## Local

### 2010 General Plan

The 2010 General Plan Safety Element establishes noise and land use compatibility standards and outlines goals and policies to achieve these standards (County of Monterey 2010). New projects in the UMC are required to meet the noise exposure compatibility standards listed in Table S-2 in the Safety Element, shown in Table 1, 2010 General Plan Safety Element Land Use Compatibility for Community Noise (dB CNEL), when evaluating the land use of proposed development projects. The following goals and policies listed in the Safety Element are applicable to the project:

- **Goal S-7:** Maintain a healthy and quiet environment free from annoying and harmful sounds.
  - **Policy S-7.2:** Proposed development must incorporate design elements necessary to minimize noise impacts on surrounding land uses and to reduce noise in indoor spaces to an acceptable level.
  - **Policy S-7.3:** Development may occur in areas identified as "normally unacceptable" provided effective measures to reduce both the indoor and outdoor noise levels to acceptable levels are taken.
  - **Policy S-7.6:** Acoustical analysis shall be part of the environmental review process for projects when:
    - Noise sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" or higher according to the County's Land Use Compatibility Standards (Table 1).
    - Proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptor.
  - **Policy S-7.7:** All proposed discretionary residential projects that are within roadway or railroad noise contours of 60 CNEL or greater shall include a finding of consistency with the provisions of the Noise Hazards section of the Safety Element. If found that roadway noise exceeds the 60 CNEL within the project site, a project-specific noise impact analysis shall be required. If impacts are identified, the applicant shall conduct mitigation analysis using published Caltrans/FHWA guidelines and implement mitigation measures as required. Mitigation measures may include, but are not limited to sound walls, adjacent roadway design, dual pane glass, building location or design, etc. Any proposed mitigation measures shall be concurrently implemented with the implementation of the project.
  - **Policy S-7.9:** No construction activities pursuant to a County permit that exceed "acceptable" levels listed in Table 1 shall be allowed within 500 feet of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays, prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include but not be limited to:
    - Constructing temporary barriers, or
    - Using quieter equipment than normal.

As shown in Table 1, in low-density residential areas, ambient noise levels up to 60 dB CNEL are considered normally acceptable. In multi-family residential areas, ambient noise levels up to 65 dB CNEL are considered normally acceptable. Land uses in areas where ambient noise levels are identified as "normally acceptable" are considered satisfactory based on the assumption that buildings involved are of normal conventional construction, without any special noise insulation requirements. Land uses in areas that experience a noise level that falls into the "conditionally acceptable" range require a detailed analysis of the noise reduction requirements, and noise insulation features must be included in the design—conventional construction but with closed window and fresh air supply systems or air conditioning will normally suffice. For land uses where exterior noise levels fall within the "normally unacceptable" range, new construction or development should generally be discouraged. If new construction or development proceeds, a detailed analysis of the noise reduction requirements must be made, and needed noise insulation features must be included in the design. For land uses where the exterior noise levels fall within the "clearly unacceptable" range, new construction generally shall not be undertaken (County of Monterey 2010).

**Table 1. 2010 General Plan Safety Element Land Use Compatibility for Community Noise (dB CNEL)**

| Land Use Category | Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
|---|---|---|---|---|
| Residential – Low-Density Single Family, Duplex, Mobile Homes | <55–60 | 55–70 | 70–75 | 75–80 |
| Residential – Multi-family | <55–65 | 60–70 | 70–75 | 75–80 |
| Transient Lodging – Motels, Hotels | <55–65 | 60–70 | 70–80 | 80+ |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | 55–70 | 60–70 | 70–80 | 80+ |
| Auditoriums, Concert Halls, Amphitheaters | NA | 55–70 | 65–80 | NA |
| Sports Arena, Outdoor Spectator Sports | NA | 55–75 | 70–80 | NA |
| Playground, Neighborhood Parks | 55–70 | <65–70 | <70–80 | NA |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | 55–75 | 70–80 | NA | 80+ |
| Office Buildings, Business Commercial and Professional | 55–70 | <65–75 | 75–80 | NA |
| Industrial, Manufacturing, Utilities and Agriculture | 55–70 | 70–75 | >75 | NA |

**Source:** County of Monterey 2010.
**Notes:** CNEL = community noise equivalent level; dB = decibel; NA = not applicable

## Significance Thresholds

Implementation of the project would result in a significant direct impact if it resulted in an increase in vehicle noise levels exceeding the normally acceptable noise standard for residences. Per 2010 General Plan Safety Element Policy S-7.7 and Table 1, 60 dBA CNEL is an acceptable noise standard for both single- and multi-family residences. The HEU6 would accommodate various housing types and densities; therefore, 60 dBA is used at the threshold for this analysis, although noise levels up to 65 dBA CNEL are within the normally compatible range for multi-family residences. A significant impact would also occur if the project would result in a noticeable (more than 3 dBA) increase in noise levels on roadways exceeding 60 dBA CNEL without the project. The project would also result in a significant impact if it resulted in the development of new sensitive receptors in areas exposed to noise levels in excess of the compatibility standards listed in Table 1.

## Impact Analysis

The following analysis includes an analysis of increases in vehicle noise that may result from project implementation and the potential for new sensitive receptors to be exposed to incompatible noise levels.

### Permanent Increase in Vehicle Noise

The potential for implementation of the project to permanently increase ambient noise levels as a result of increased traffic was assessed using standard noise modeling equations adapted from the FHWA Noise Prediction Model (Attachment 1, FHWA Traffic Noise Prediction Model Results). The modeling calculations take into account the posted vehicle speed, median width, average daily trip volume, and estimated vehicle mix. Traffic volumes and roadway characteristics with buildout of the project were obtained from Kimley-Horn (Kimley-Horn 2026). Noise levels were calculated at 50 feet from the centerline of each roadway segment. Generally, noise from heavily traveled roadways experience a decrease of approximately 3 dBA for every doubling of distance. The actual sound level at any receptor location depends on such factors as the source-to-receptor distance and the presence of intervening structures, barriers, vegetation, and topography; therefore, the result of the calculations is the worst-case scenario.

The 10 transportation analysis study area segments that would experience the greatest percent increase in vehicle trips as a result of project implementation are modeled to represent the potential changes in traffic noise conditions compared to future conditions without the project. Timing of new housing in the UMC is unknown, and buildout is assumed to occur through the year 2031, during which regional growth and development elsewhere in Monterey County will occur. The project would implement planned growth, but growth under the HEU6 in the transportation analysis is evaluated to identify HEU6-level community impacts (Kimley-Horn 2026). As such, attributing the increase in vehicle trips to the project is conservative.

Table 2, Future Traffic Noise Levels (Year 2031), provides long-term increases in noise levels with project implementation. As shown in Table 2, implementation of the project would not result in a more than 3 dBA increase on any roadway segment. Project implementation would cause two roadway segments to exceed 60 dBA CNEL at 50 feet from the roadway centerline by less than 1 dBA:

- Olmstead Road from SR-68 to Via Malposo
- The future extension of El Dorado Drive from San Juan-Natividad Collector to East Boronda Road

However, as shown in Attachment 1, the 60 dBA CNEL contour for these roadways would be 55 feet or less from the roadway centerline. As such, there is limited potential for new single-family residential structures to be within the future 60 dBA CNEL contour. There are no existing sensitive receptors within this contour distance on either roadway segment. Under the HEU6, Opportunity Site 52, located adjacent to Olmstead Road, would be split zoned for High Density Residential at 30 dwelling units per acre (HDR/30) and Resource Conservation (RC) and would be normally compatible with noise levels up to 65 dBA CNEL. Additionally, a noise level of 60.4 or 60.6, is functionally the same as 60 dBA CNEL as related to actual experience in the noise environment and, therefore, consistent with the 60 dBA CNEL threshold for noise exposure. As described in the Caltrans Technical Noise Supplement (Caltrans 2013), a trained, healthy human ear may discern changes in sound levels of 1 dBA when exposed to steady noise under controlled conditions in an acoustics laboratory. Therefore, noise levels that are less than a 1 dBA change from 60 dBA CNEL would generally be experienced as 60 dBA CNEL even under a conservative controlled laboratory condition. Therefore, the project would not result in a significant direct vehicle noise impact.

**Table 2. Future Traffic Noise Levels (Year 2031)**

| Roadway | Segment | Future Noise Level (dBA CNEL) | Future + Project (dBA CNEL) | Increase in Noise Level | Significant Impact? |
|---|---|---|---|---|---|
| Russell Road | Bahia Avenue to Van Buren Avenue | 69.7 | 72.1 | 2.4 | No |
| San Juan Grade Road | Van Buren Avenue to Russell Road | 66.7 | 67.9 | 1.2 | No |
| Old Stage Road | Goat Road to Chualar Road | 56.1 | 56.8 | 0.7 | No |
| Olmsted Road | Salinas Highway (SR-68) to Via Malposo | 58.4 | 60.4 | 2.0 | No |
| Josselyn Canyon Road | Sylvan Road to Oak Crest Circle | 49.4 | 51.1 | 1.7 | No |
| Broadway Avenue | Ancon Street to Yosemite Street | 55.7 | 56.7 | 1.0 | No |
| N Main Street | South of Russell Road | 68.8 | 70.7 | 1.9 | No |
| Frontage Road | Esperanza Road to Payson Street | 57.5 | 59.1 | 1.6 | No |

**Table 2. Future Traffic Noise Levels (Year 2031)**

| Roadway | Segment | Future Noise Level (dBA CNEL) | Future + Project (dBA CNEL) | Increase in Noise Level | Significant Impact? |
|---|---|---|---|---|---|
| Independence Boulevard | Russell Road Extension to East Boronda Road | 60.3 | 62.1 | 1.8 | No |
| El Dorado Drive Extension | San Juan-Natividad Collector to East Boronda Road | 58.2 | 60.6 | 2.4 | No |

**Source:** Refer to Attachment 1.
**Notes:** CNEL = community noise equivalent level; dBA = A-weighted decibel; SR- = State Route

## Noise Incompatibilities with New Sensitive Receptors

In addition to the potential to increase vehicle noise as a result of future development, implementation of the project would have the potential to result in the placement of new sensitive receptors in areas that would be exposed to vehicle noise levels in excess of the County's noise and land use compatibility standards. As shown in Table 2 vehicle noise on several modeled segments would be within the normally acceptable noise level range of up to 60 dBA CNEL at 50 feet from roadway centerlines under existing and future conditions. Therefore, conventional construction—such as wall, insulation, and window design consistent with current building codes—would generally be sufficient to reduce noise exposure to an acceptable level. However, noise levels higher than 60 dBA CNEL are calculated for Russell Road from Bahia Avenue to Van Buren Avenue (60 dBA CNEL up to 322 feet from centerline), San Juan Grade Road from Van Buren Avenue to Russel Road (60 dBA CNEL up to 169 feet from centerline), North Main Street south of Russell Road (60 dBA CNEL up to 258 feet from centerline), and Independence Boulevard from Russell Road Extension to East Boronda Road (69 dBA CNEL up to 69 feet from centerline). As described above, modeled segments of Olmsted Road and El Dorado Drive are calculated to exceed 60 dBA up to 55 feet from centerline. These segments are modeled to represent the project's impact on roadways but are not the only roadway in the UMC that could expose new residence to noise levels above 60 dBA CNEL. Modeled roadways that are calculated to result in noise levels below 60 dBA generally experience 2,200 average daily traffic (ADT) or less when posted speed limit is 45 miles per hour (mph), and 7,800 ADT or less when posted speed limit is 25 mph. As such, future residences along higher-speed roadways experiencing 1,200 ADT or more would have the potential to be in an area that exceeds the County's normally acceptable standard for residential development. For example, Opportunity Sites 1–3 are along Russell Road, and new development would likely be exposed to noise levels above 60 dBA CNEL.

Development streamlining under the Consistency Process of the HEU6 would be required to comply with 2010 General Plan Safety Element Noise Policies S-7.2, S-7.3, S-7.6, and S-7.7 and 1982 General Plan Policy 22.2.2, provided above in Regulatory Setting. These policies require proposed new sensitive receptors to include a site-specific evaluation of potential noise exposure and installation of noise attenuation if the new receptors will be in an area where interior noise levels may exceed 60 dBA CNEL. Policy S-7.6 specifically requires an acoustical analysis for projects where noise-sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" or higher, and Policy S-7.7 requires an acoustical analysis where roadway noise would exceed 60 dBA CNEL. Policies S-7.2-, S-7.3, and S-7.7 specially require that new development projects incorporate measures to ensure noise compatibility for interior and exterior noise, such as implementation of sound walls, dual pane glass, or changes to building location on a site. Additionally, all new residential development in the project area would be subject to existing state requirements to demonstrate that interior noise levels of 45 dBA CNEL would be achieved in areas potentially exposed to traffic noise above compatible noise levels. This requirement is also found in 1982 General Plan Policy 22.2.2. Title 24 of the California Code of Regulations requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise, with windows closed, attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure may be exposed to exterior noise levels of 60 dBA CNEL or greater. With this existing state

and County framework, future development under the HEU6 would be required to demonstrate that appropriate noise attenuation has been incorporated into project design to achieve noise compatibility.

To ensure compliance with policy requirements in 2010 General Plan Safety Element Policies S-7.2, S-7.3, S-7.6, and S-7.7 or 1982 General Plan Policy 22.2.2 for residential projects streamlining under the Objective Process, implementation of MM-NOI-OBJ-3 would require preparation of acoustical studies, if required based on location, and incorporation of noise reduction measures in compliance with Policies S-7.2, S-7.3, S-7.6, and S-7.7 of the 2010 General Plan Safety Element.

**MM-NOI-OBJ-3:** For by-right development, the County shall include MM-NOI-OBJ-3 in the by-right housing ordinance. Prior to approval of a grading permit for new development streamlining under the Objective Process, developers shall submit a Noise Screening Package with a description of the project, construction plans, land use maps, and roadway and (if applicable) railroad noise contours. The Noise Screening Package shall provide evidence that the development would not include noise-sensitive receptors proposed in areas exposed to existing or projected noise levels that are higher than "normally acceptable" according to Table S-2 (Land Use Compatibility for Community Noise) in the 2010 General Plan Safety Element (greater than 60 Community Noise Equivalent Level (CNEL) for single-family residences or 65 CNEL for multiple-family residences). A project may be in an area exposed to noise levels above normally acceptable if it is within a roadway or railroad noise contours of 60 CNEL or greater. Roadways that may result in noise levels above 60 A-weighted decibel (dBA) at adjacent properties generally experience greater than 2,200 average daily traffic (ADT) when the posted speed limit is 45 miles per hour (mph), and greater than 7,800 ADT when posted speed limit is 25 mph. Roadways that may result in noise levels above 65 dBA at adjacent properties generally experience greater than 6,000 ADT when the posted speed limit is 45 mph, and greater than 23,000 ADT when posted speed limit is 25 mph. A project adjacent to a roadway meeting these criteria may be exposed to noise levels higher than normally acceptable. The County shall ensure that these items are included in project construction documents.

If the project cannot submit evidence that it is outside the 60 dBA CNEL or 65 dBA CNEL or greater contour, as applicable, in the Noise Screening Package, an acoustical study shall be prepared for the development by a certified acoustical engineer and submitted to the County prior to approval of grading permit, or if no grading permit is required, prior to beginning earthwork. The acoustical study shall include a description of the existing noise setting and evaluate the potential for the project to expose noise-sensitive receptors to above normally compatible standards. Should the results of the acoustical study indicate that that exterior noise would exceed normally compatible conditions, the certified acoustical engineer shall include a detailed analysis of noise reduction requirements for the project design to ensure that the interior noise level of any habitable room does not exceed 45 dBA CNEL. The certified acoustical engineer shall require design measures and noise insulation features that may include the following:

- Acoustical paneling or sound walls
- Dual pane glass
- Building location or design
- Roadway design

If it is necessary for windows to be able to remain closed to ensure that interior noise levels meet the interior standard of 45 dBA CNEL, the design for these residences shall include ventilation or an air conditioning system to provide a habitable interior environment with the windows closed.

Final project design shall incorporate the design measures and noise insulation features identified by the certified acoustical engineer in the construction of the residential units. The County shall ensure that these items are included in project construction documents.

## Summary

Implementation of the project would not result in a significant direct impact related to vehicle noise. New sensitive receptors accommodated by the HEU6 would have the potential to be exposed to noise levels in excess of

normally compatible noise standards. For projects that are streamlined under the Consistency Process, compliance with the 2010 General Plan Safety Element and California Building Code requirements would reduce impacts related to exposure to vehicle noise to a less than significant level without mitigation. Implementation of MM-NOI-OBJ-3 would require preparation of acoustical studies that would reduce impacts from projects streamlined under the Objective Process to a less than significant level.

## References

Caltrans (California Department of Transportation). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.

County of Monterey. 2010. “Chapter 4: Safety Element.” In the Monterey County General Plan. Adopted October. Revised April 20.

Kimley-Horn. 2026. Vehicle Miles Traveled Memorandum for County of Monterey Housing Element.

## Attachment 1. FHWA Traffic Noise Prediction Model Results

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## TRAFFIC NOISE LEVELS AND NOISE CONTOURS

**Project Number:**
**Project Name:** Monterey County HEU

**Background Information**

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, December 2008
Community Noise Descriptor: $L_{dn}$: ____ CNEL: X

| Assumed 24-Hour Traffic Distribution: | Day | Evening | Night |
|---|---|---|---|
| Total ADT Volumes | 77.70% | 12.70% | 9.60% |
| Medium-Duty Trucks | 87.43% | 5.05% | 7.52% |
| Heavy-Duty Trucks | 89.10% | 2.84% | 8.06% |

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

| Analysis Condition / Roadway, Segment | Lanes | Median Width | ADT Volume | Design Speed (mph) | Alpha Factor | Vehicle Mix: Medium Trucks | Vehicle Mix: Heavy Trucks | Distance from Centerline of Roadway: CNEL at 50 Feet | Distance to Contour: 70 CNEL | 65 CNEL | 60 CNEL | 55 CNEL | Calc Dist | Traffic Volumes: Day | Eve | Night | MTd | HTd | MTe | HTe | MTn | HTn | Ref. Energy Leve: A | MT | HT | Dist Ld | Adj | Le: A | MT | HT | Total | Ln: A | MT | HT | Total | DISTANCE TO CONTOUR (2): 70 CNEL | 65 CNEL | 60 CNEL | 55 CNEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Russell Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bahia Avenue to Van Buren Ave, future (2031) | 4 | 15 | 10,173 | 45 | 0.5 | 4.6% | 2.3% | **69.7** | - | 103 | 222 | 479 | 50 | 7,904 | 1,292 | 977 | 406 | 208 | 23 | 7 | 35 | 19 | 69.3 | 77.6 | 82.1 | 0.9 | 66.2 | 62.0 | 63.6 | 69.0 | 63.4 | 54.4 | 53.4 | 64.3 | 58.4 | 52.5 | 54.3 | 60.6 | 48 | 103 | 222 | 479 |
| Bahia Avenue to Van Buren Ave, future + project buildout (2031 | 4 | 15 | 20,973 | 45 | 0.5 | 2.7% | 1.3% | **72.1** | 69 | 149 | 322 | 693 | 50 | 16,296 | 2,664 | 2,013 | 486 | 249 | 28 | 8 | 42 | 22 | 69.3 | 77.6 | 82.1 | 0.9 | 69.5 | 62.7 | 64.3 | 71.3 | 66.6 | 55.1 | 54.2 | 67.1 | 61.7 | 53.3 | 55.1 | 63.0 | 69 | 149 | 322 | 693 |
| **San Juan Grade Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Van Buren Avenue to Russell Road, future (2031) | 2 | 0 | 7,032 | 45 | 0.5 | 3.2% | 1.6% | **66.7** | - | 64 | 139 | 299 | 50 | 5,464 | 893 | 675 | 194 | 99 | 11 | 3 | 17 | 9 | 69.3 | 77.6 | 82.1 | -0.1 | 63.8 | 57.8 | 59.4 | 65.9 | 60.9 | 50.2 | 49.2 | 61.5 | 56.0 | 48.3 | 50.2 | 57.5 | 30 | 64 | 139 | 299 |
| Van Buren Avenue to Russell Road, future + project buildout (20 | 2 | 0 | 10,483 | 45 | 0.5 | 2.1% | 1.1% | **67.9** | 36 | 79 | 169 | 365 | 50 | 8,145 | 1,331 | 1,006 | 192 | 98 | 11 | 3 | 17 | 9 | 69.3 | 77.6 | 82.1 | -0.1 | 65.6 | 57.8 | 59.4 | 67.1 | 62.6 | 50.2 | 49.2 | 63.1 | 57.8 | 48.3 | 50.1 | 58.9 | 36 | 79 | 169 | 365 |
| **Old Stage Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Goat Road to Chualar Road, future (2031) | 2 | 0 | 906 | 35 | 0.5 | 4.8% | 2.4% | **56.1** | - | - | - | 59 | 50 | 704 | 115 | 87 | 38 | 19 | 2 | 1 | 3 | 2 | 65.1 | 74.8 | 80.0 | -0.1 | 51.6 | 49.0 | 51.3 | 55.5 | 48.8 | 41.4 | 41.1 | 50.1 | 43.8 | 39.5 | 42.0 | 46.9 | 6 | 13 | 27 | 59 |
| Goat Road to Chualar Road, future + project buildout (2031) | 2 | 0 | 1,177 | 35 | 0.5 | 3.8% | 1.9% | **56.8** | - | - | - | 66 | 50 | 915 | 149 | 113 | 40 | 20 | 2 | 1 | 3 | 2 | 65.1 | 74.8 | 80.0 | -0.1 | 52.8 | 49.2 | 51.5 | 56.2 | 50.0 | 41.6 | 41.3 | 51.0 | 45.0 | 39.7 | 42.2 | 47.6 | 7 | 14 | 30 | 66 |
| **Olmsted Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salinas Highway (Highway 68) to Via Malposo, future (2031) | 2 | 0 | 4,909 | 25 | 0.5 | 1.3% | 0.6% | **58.4** | - | - | 39 | 84 | 50 | 3,814 | 623 | 471 | 55 | 28 | 3 | 1 | 5 | 3 | 59.4 | 71.1 | 78.7 | -0.1 | 55.0 | 48.4 | 53.1 | 57.7 | 52.0 | 40.8 | 42.9 | 52.8 | 47.2 | 38.9 | 43.8 | 49.2 | 8 | 18 | 39 | 84 |
| Salinas Highway (Highway 68) to Via Malposo, future + project b | 2 | 0 | 7,868 | 25 | 0.5 | 1.3% | 0.6% | **60.4** | - | - | 53 | 114 | 50 | 6,113 | 999 | 755 | 87 | 44 | 5 | 1 | 7 | 4 | 59.4 | 71.1 | 78.7 | -0.1 | 57.1 | 50.3 | 55.1 | 59.7 | 54.1 | 42.7 | 44.9 | 54.8 | 49.2 | 40.9 | 45.8 | 51.3 | 11 | 25 | 53 | 114 |
| **Josselyn Canyon Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sylvan Road to Oak Crest Circle, future (2031) | 2 | 0 | 379 | 25 | 0.5 | 3.4% | 1.7% | **49.4** | - | - | - | - | 50 | 294 | 48 | 36 | 11 | 6 | 1 | 0 | 1 | 1 | 59.4 | 71.1 | 78.7 | -0.1 | 43.7 | 41.5 | 46.2 | 49.0 | 40.8 | 33.9 | 36.0 | 42.7 | 35.9 | 32.0 | 37.0 | 40.2 | 2 | 5 | 10 | 21 |
| Sylvan Road to Oak Crest Circle, future + project buildout (2031 | 2 | 0 | 673 | 25 | 0.5 | 2.5% | 1.3% | **51.1** | - | - | - | - | 50 | 523 | 85 | 65 | 15 | 8 | 1 | 0 | 1 | 1 | 59.4 | 71.1 | 78.7 | -0.1 | 46.3 | 42.7 | 47.4 | 50.6 | 43.4 | 35.1 | 37.2 | 44.8 | 38.5 | 33.2 | 38.1 | 41.9 | 3 | 6 | 13 | 27 |
| **Broadway Avenue** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ancon Street to Yosemite Street, future (2031) | 2 | 8 | 1,752 | 30 | 0.5 | 1.2% | 0.6% | **55.7** | - | - | - | 56 | 50 | 1,361 | 223 | 168 | 19 | 10 | 1 | 0 | 2 | 1 | 62.5 | 73.1 | 80.3 | 0.0 | 52.9 | 45.0 | 49.2 | 54.9 | 49.9 | 37.4 | 39.0 | 50.5 | 45.1 | 35.5 | 40.0 | 46.6 | 6 | 12 | 26 | 56 |
| Ancon Street to Yosemite Street, future + project buildout (2031) | 2 | 8 | 2,307 | 30 | 0.5 | 1.0% | 0.5% | **56.7** | - | - | - | 65 | 50 | 1,793 | 293 | 221 | 21 | 10 | 1 | 0 | 2 | 1 | 62.5 | 73.1 | 80.3 | 0.0 | 54.1 | 45.4 | 49.6 | 55.9 | 51.1 | 37.8 | 39.5 | 51.6 | 46.3 | 35.9 | 40.4 | 47.6 | 6 | 14 | 30 | 65 |
| **N. Main Street** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| South of Russell Road, future (2031) | 2 | 20 | 9,923 | 45 | 0.5 | 4.0% | 2.0% | **68.8** | - | 89 | 192 | 413 | 50 | 7,710 | 1,260 | 953 | 343 | 174 | 20 | 6 | 29 | 16 | 69.3 | 77.6 | 82.1 | 0.2 | 65.5 | 60.6 | 62.2 | 68.0 | 62.7 | 53.0 | 52.0 | 63.4 | 57.7 | 51.1 | 52.9 | 59.6 | 41 | 89 | 192 | 413 |
| South of Russell Road, future + project buildout (2031) | 2 | 20 | 17,815 | 45 | 0.5 | 2.4% | 1.2% | **70.7** | 56 | 120 | 258 | 555 | 50 | 13,842 | 2,263 | 1,710 | 372 | 190 | 22 | 6 | 32 | 17 | 69.3 | 77.6 | 82.1 | 0.2 | 68.2 | 60.9 | 62.6 | 69.8 | 65.2 | 53.4 | 52.4 | 65.7 | 60.4 | 51.5 | 53.3 | 61.6 | 56 | 120 | 258 | 555 |
| **Frontage Road** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Esperanza Road to Payson Street, future (2031) | 2 | 0 | 757 | 45 | 0.5 | 4.5% | 2.2% | **57.5** | - | - | 34 | 73 | 50 | 588 | 96 | 73 | 30 | 15 | 2 | 0 | 3 | 1 | 69.3 | 77.6 | 82.1 | -0.1 | 54.0 | 49.6 | 51.2 | 56.8 | 51.2 | 42.1 | 41.1 | 52.0 | 46.2 | 40.2 | 42.0 | 48.3 | 7 | 16 | 34 | 73 |
| Esperanza Road to Payson Street, future + project buildout (203 | 2 | 0 | 1,256 | 45 | 0.5 | 2.9% | 1.5% | **59.1** | - | - | 43 | 93 | 50 | 976 | 160 | 121 | 32 | 16 | 2 | 1 | 3 | 1 | 69.3 | 77.6 | 82.1 | -0.1 | 56.3 | 50.0 | 51.6 | 58.3 | 53.4 | 42.4 | 41.4 | 54.0 | 48.5 | 40.5 | 42.3 | 50.0 | 9 | 20 | 43 | 93 |
| **Independence Boulevard** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Russell Road Ext. to East Boronda Road, future (2031) | 2 | 20 | 1,860 | 45 | 0.5 | 1.1% | 0.6% | **60.3** | - | - | 52 | 113 | 50 | 1,445 | 236 | 179 | 18 | 9 | 1 | 0 | 2 | 1 | 69.3 | 77.6 | 82.1 | 0.2 | 58.5 | 47.8 | 49.4 | 59.3 | 55.5 | 40.2 | 39.3 | 55.7 | 50.6 | 38.3 | 40.2 | 51.2 | 11 | 24 | 52 | 113 |
| Russell Road Ext. to East Boronda Road, future + project buildo | 2 | 20 | 2,907 | 45 | 0.5 | 0.9% | 0.5% | **62.1** | - | - | 69 | 150 | 50 | 2,259 | 369 | 279 | 24 | 12 | 1 | 0 | 2 | 1 | 69.3 | 77.6 | 82.1 | 0.2 | 60.4 | 49.0 | 50.6 | 61.1 | 57.4 | 41.4 | 40.4 | 57.6 | 52.6 | 39.6 | 41.4 | 53.1 | 15 | 32 | 69 | 150 |
| **El Dorado Drive Ext.** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| San Juan-Natividad Collector to E. Boronda Road, future (2031) | 2 | 0 | 1,219 | 45 | 0.5 | 1.2% | 0.6% | **58.2** | - | - | 38 | 82 | 50 | 947 | 155 | 117 | 13 | 7 | 1 | 0 | 1 | 1 | 69.3 | 77.6 | 82.1 | -0.1 | 56.3 | 46.1 | 47.7 | 57.2 | 53.3 | 38.5 | 37.5 | 53.6 | 48.5 | 36.7 | 38.4 | 49.1 | 8 | 18 | 38 | 82 |
| San Juan-Natividad Collector to E. Boronda Road, future + proje | 2 | 0 | 2,213 | 45 | 0.5 | 0.9% | 0.4% | **60.6** | - | - | 55 | 119 | 50 | 1,720 | 281 | 212 | 17 | 9 | 1 | 0 | 1 | 1 | 69.3 | 77.6 | 82.1 | -0.1 | 58.9 | 47.2 | 48.8 | 59.6 | 55.9 | 39.6 | 38.7 | 56.1 | 51.1 | 37.7 | 39.6 | 51.6 | 12 | 26 | 55 | 119 |

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Kimley»Horn

# Memorandum

**To:** Elizabeth Kim
Project Manager, Harris and Associates

**From:** Ayberk Kocatepe, PhD
Anais Schenk, AICP
Frederik Venter, PE
Michael Schmitt, AICP CTP, PTP, $RSP_1$

***Re:*** DRAFT: *Monterey County General Plan Housing Element EIR*
Transportation Analysis

**Date:** June 22, 2026

This memorandum documents the California Environmental Quality Act (CEQA) transportation analysis completed for Monterey County General Plan Housing Element Sixth Cycle (2023-2031) Update ("proposed Project" or "Housing Element") located in Monterey County, California. Specifically, this memorandum evaluates how the Project might affect vehicle miles traveled (VMT), active transportation and transit (multimodal), hazards, and emergency access. The analyses were completed based on the following checklist items as identified in the 2024 CEQA Statute Guidelines Appendix G Section XVII:

a) **Multimodal**: Does the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
b) **Vehicle Miles Traveled (VMT)**: Does the project conflict with, or will it be inconsistent with, CEQA Guidelines 15064.3, subdivision (b)?
c) **Hazards**: Does the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
d) **Emergency Access**: Does the project result in inadequate emergency access?

The proposed Project seeks to address the housing unit shortfall identified in the 6th Cycle Housing Element Regional Housing Needs Assessment (RHNA) by incorporating plans for new housing development. These land use adjustments will comply with the policies set forth in the County's existing General Plan and other adopted plans. The Housing Element includes a total of 56 opportunity sites: Opportunity Sites 1 through 6, 8 through 56, and 64, totaling 4,434 housing units as a reasonable development capacity. However, this Transportation Analysis evaluates the highly unlikely theoretical maximum buildout scenario of 12,497 units to fully disclose the potential environmental consequences associated with the highest intensity of development legally permitted under the proposed rezoning acreage of 445.69 acres for impacts. **Table 1** below provides a summary of the land use totals based on the descriptions within the proposed Project under the theoretical maximum buildout scenario.

**Table 1 –** Project Land Use

| Description | Housing Units |
|---|---|
| Entitled or Pipeline Sites | 1,117 |
| Opportunity Sites | 12,497 |
| Total | 13,614 |

## Vehicle Miles Traveled (VMT) Analysis

With the passage of SB 743 in 2013, and particularly since 2020 when Level of Service (LOS) was eliminated as a CEQA threshold for a significant transportation impact, vehicle miles traveled (VMT) has become an important indicator for determining if new development will result in a significant transportation impact. To determine whether there were significant impacts related to transportation, VMT from residential and employment-based land uses was analyzed as described in the methodology section below.

The most recent version of the Association of Monterey Bay Area Governments Regional Travel Demand Model (AMBAG RTDM), which was released in 2022[1], served as a tool for calculating VMT. The land uses were evaluated based on the following scenarios:

- Baseline – 2023 land use in the incorporated and unincorporated areas of the County
- 2031 No Project – 2031 land uses in the incorporated and unincorporated areas based on the Housing Element update in the County.
- 2031 With Project – 2031 land uses in the incorporated and unincorporated areas based on the Housing Element in the County.

### *Methodology*

The AMBAG RTDM has a base year of 2015 and a future year of 2045, however the baseline year for the proposed Project is 2023 and the horizon year is 2031. Additionally, the AMBAG model is calibrated to a tri-County area. To address the discrepancy in the baseline year and the horizon year, as well as conduct a more locally specific VMT analysis, Replica, a big traffic and mobility data platform, was used to calculate the baseline VMT per capita and VMT per employee. The growth over time was obtained using the AMBAG RTDM by calculating the percent difference in VMT for each land use and applying that percentage as growth to the Replica baseline VMT.

Replica data is provided by Census Block Group rather than by Traffic Analysis Zone (TAZ). To account for this each TAZ was associated with a Block Group. The percent difference was calculated using a weighted average for population and employment within each Block Group. This percent difference was then applied to the Replica VMT per capita and VMT per employee for each Block Group to calculate VMT growth for the 2031 No Project and 2031 with Project scenario.

To obtain residential VMT, the production VMT for all Home-Based trip purposes was combined. VMT for non-residential land uses was computed from the attraction Home-Based Work VMT. As noted previously, Replica data was used to supplement the model. The employment land use VMT was calculated by dividing the number of trips by the share of each employment category. The share of employment was obtained from the model's underlying trip generation rates.

Replica data was also used in the calculation of external VMT. For residential land uses, calibrated trip distances from Replica were multiplied by the total internal-external (I-X) Home-Based trips for each TAZ. For non-residential uses, calibrated trip distances from Replica were multiplied by internal-external (I-X) Home-Based Work trips for each TAZ.

VMT per Capita and VMT per Employee was computed by dividing the residential and non-residential VMT by TAZ by the total population or total employees.

[1] The AMBAG RTDM was provided to Kimley-Horn by AMBAG staff in September 2022.

*Model Inputs*

Development projections for the Housing Element were sourced from the Client and AMBAG staff and required modifications to the AMBAG RTDM land use data. The resulting land use totals for the scenarios are summarized in Table 2 below.

- For the Environmental Impact Review (EIR) to mirror the County's actual conditions, the employment assumptions for the 2023 Baseline were adjusted based on Census, LEHD, and previous work in the region. However, the total employment growth (control total) between 2023 and 2045 was kept consistent.
- Employment growth between 2023 and 2045 was redistributed to the relevant County Traffic Analysis Zones (TAZs) to reflect land use and zoning changes that would be made for implementation of the 2031 Housing Element.
- The growth of housing units (i.e., The growth of households) in the unincorporated County of Monterey from 2023 to 2031 without the Project is 2,326 units. In the incorporated areas of the County, the growth amounted to 20,476 units.
- To estimate VMT more precisely in two particularly expansive TAZs that included new residential developments (TAZ 577 and TAZ 771), zones were split into multiple TAZs that covered smaller areas. The splits were done because otherwise traffic would have been directed to inappropriate roadways, leading to flawed VMT projections.
- The AMBAG RTDM does not feature interim years such as the 2031 analysis year: the model includes a base year of 2015 and a horizon year of 2045. To develop land use inputs for the 2023 year, data from the Census, LEHD, and the County was used for demographics. For 2031 land use, values were interpolated based on the growth observed in the AMBAG RTDM.
- The 2031 No Project scenario includes projected land use changes for 2023-2031 in the cities and across the County, including 1,117 units defined as pipeline sites. The 2031 With Project scenario includes projected land use changes for 2023-2031 across the County, including both pipeline sites and 12,497 additional units as opportunity sites located within the unincorporated areas. Opportunity Sites are sites for which the County has a reasonable expectation that housing development could occur, though no proposals or entitlements have been submitted. The total capacity for each Opportunity Site was developed based on the maximum capacity under the Sites' planned zoning. Pipeline Sites are sites where housing has been proposed and/or entitled, and where development is expected to receive a building permit or certificate of occupancy.

Table 2 – Land Use Inputs

| Scenario | Households (Unincorporated County) | Employment (Unincorporated County) | Households (Entire County) | Employment (Entire County) |
|---|---|---|---|---|
| 2023 Baseline | 35,232 | 55,440 | 132,414 | 212,118 |
| 2031 No Project | 37,191 | 57,759 | 154,8494 | 222,253 |
| 2031 With Project | 49,688 | 57,759 | 167,346 | 222,253 |

The AMBAG RTDM adopted in 2022 provides land uses based on residential and employment classifications. Employment classifications are broken into eleven categories that group together various industries based on similar trip-making characteristics. Note that the eleven employment categories were an expansion compared to the previously adopted AMBAG model, which only contained six employment categories. Table 3 below shows the cross-reference between the North American Industry Classification System (NAICS) industries and AMBAG sectors.

Table 3 – AMBAG RTDM Employment Categories

| Category | Description and NAICS codes |
|---|---|
| Agriculture (AGR) | Agriculture, Forestry, Fishing, and Hunting (11)* |
| Construction (TR_CON) | Construction (23), Utilities (22), Transportation and Warehousing (48-49), Administrative and Support and Waste Management and Remediation Services (56), Public Administration (92)* |
| Manufacturing and Mining (MFG) | Mining (21), Manufacturing (22, 31-33), |
| Wholesale (WHL) | Wholesale Travel (42), Agriculture, Forestry, Fishing, and Hunting (11)* |
| Retail (RET) | Retail Trade (44-45) |
| Finance and Real Estate (FIRE) | Information (51), Finance and Insurance (52), Real Estate Rental and Leasing (53), Professional, Scientific, and Technical Services (54), Management of Companies and Enterprises (55) |
| Education (EDU) | Educational Services (61), Public Administration (92)* |
| Healthcare (HLT) | Health Care and Social Assistance (62) |
| Service (SER) | Art, Entertainment, and Recreation (71), Accommodation and Food Service (72), and Other Services (81) |
| Public (PUB) | Public Administration (92)* |
| Self | Self-Employed |
| *Note: Some NAICS industry sectors have been divided up, based on business operations and transportation demand, across AMBAG sectors. | |

Roadway Network Assumptions

Kimley-Horn updated AMBAG RTDM's baseline and future year roadway network based on the current data available for the AMBAG area, including anticipated roadway network improvements from the 20102010 General Plan. Future roadway projects in Santa Cruz County and San Benito County were sourced from the AMBAG RTDM. The land use and roadway network modifications were based on the County and approved projects/developments.

### *VMT Thresholds of Significance*

In January 2019, the California Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of Administrative Law and are now in effect. Specific to SB 743, CEQA Guidelines Section 15064.3(c) states, "The provisions apply statewide as of July 1, 2020." To aid lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR), now referred to as the Office of Land Use and Climate Innovation (LCI) produced a VMT Analysis Guidelines[2] document that included detailed guidance about the variety of implementation questions with respect to shifting to a VMT metric.

Analysis was performed for the proposed Project based on the OPR guidelines for the determination of VMT related impacts. The resulting VMT thresholds consider the VMT performance of residential and

[2] *Technical Advisory on Evaluating Transportation Impacts in CEQA.* Governor's Office of Planning and Research, State of California. December 2018.

non-residential components of a project separately, using the efficiency metrics of VMT per capita and VMT per employee, respectively. It should be noted that the County has not officially adopted thresholds. However, the thresholds presented here are based on OPR Guidance. Thresholds of significance are summarized below and in Table 4.

- *Residential* – 15% below baseline (existing) average VMT per capita
- *Employment-based land uses: office, service, professional services* – 15% below baseline (existing) average VMT per employee
- *Retail* – net change

### *OPR Technical Advisory's VMT Screening Criteria*

OPR Technical Advisory identifies the following common screening approaches for land use projects:

- Small Project Screening[3] – Small residential projects generating a limited number of daily vehicle trips (often using a local agency threshold such as fewer than 110 daily trips, consistent with common CEQA screening practices) may be screened from detailed VMT analysis because their contribution to regional VMT is negligible.
- Map-Based Screening – Residential projects located in an area where existing household VMT is at least 15 percent below the regional average may be presumed to have a less-than-significant VMT impact.
- Transit Priority Area Screening – Residential projects located within one-half mile of an existing major transit stop or an existing stop along a high-quality transit corridor may qualify for screening, provided there is no substantial evidence indicating unusual circumstances that would result in above-average VMT.
- Affordable Housing Screening – Residential projects consisting of deed-restricted affordable housing for lower-income households may be presumed to have a less-than-significant VMT impact because lower-income households generally generate less VMT than regional averages.

### *VMT Findings and Mitigation*

Table 4 summarizes VMT results as compared to the thresholds. The thresholds were calculated to be 14.3 VMT per capita for residential uses and 18.9 VMT per employee for employment using the 15% below baseline guideline. The 2031 No Project scenario resulted in a VMT per capita of 21.5 and VMT per employee of 30.4. The 2031 Plus Project scenario resulted in a VMT per capita of 20.9 and VMT per employee of 31.7. VMT per capita value is reduced by 0.6 VMT per capita between the 2031 No Project and 2031 Plus Project scenarios for residential uses. However, the VMT per employee value is increased by 1.3 VMT per employee between the 2031 No Project and 2031 Plus Project scenarios for employment uses. Notably, both 2031 scenarios—whether No Project or With Project—exceed the VMT thresholds.

[3] Cleveland National Forest Foundation v. County of San Diego (2025) 110 Cal.App.5th 543, reaffirmed that the OPR's Technical Advisory is nonbinding guidance and that agencies must support their adopted methodologies with substantial evidence. Accordingly, this information is included for informational purposes only and the this report does not rely on the Technical Advisory's recommended screening criteria.

Table 4 – Vehicle Miles Traveled (VMT) by Scenario

| Jurisdiction | 2031 No Project | | 2031 Plus Project | |
|---|---|---|---|---|
| | VMT/Capita | VMT/Employee | VMT/Capita | VMT/Employee |
| **Threshold** | **14.3** | **18.9** | **14.3** | **18.9** |
| Unincorporated County of Monterey | 21.5 | 30.4 | 20.9 | 31.7 |
| Percent of Threshold | 150.3% | 160.8% | 146.2% | 167.7% |
| **Over Threshold?** | **Yes** | **Yes** | **Yes** | **Yes** |

The proposed Project anticipates the development of a multitude of sites throughout the County. Due to the general nature of the proposed Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that will reduce VMT for specific projects as part of this analysis. The significant VMT impacts identified in Table 4 reflect the VMT for implementation of the entire proposed Project. Individual sites included in the proposed Project may or may not exceed the threshold of significance and they may include site-specific elements or mitigation measures that reduce VMT to below the threshold of significance. As such the significant impacts identified in Table 4 are unavoidable given known current feasible mitigation options. As there will undoubtedly be mitigation applied at the project level, the findings of the Table 4 should be considered a worst-case scenario.

There are a multitude of VMT-reducing design principles, policies, and improvements that are further described in this section which may ultimately mitigate and/or potentially reduce the VMT impacts outlined in this evaluation in the future. However, the potential VMT-reducing approaches cited in this section will require further planning and development, as well as committed funding sources including those from participants in the development community (many of which may not be identified yet as large areas of land may be further subdivided into specific projects and development). These strategies remain vital when interpreting the outcomes of this VMT assessment, and where relevant, they should be incorporated in future VMT evaluations within the County.

VMT Reducing Design Principles

Project design features that reduce VMT can potentially lower the overall VMT of the proposed Project. Considerations include:

- Compactness of design and transit-oriented development
- Providing a range of housing options
- Incorporation of a mix of uses
- Walkable and bikeable community design
- A variety of mobility and access options

Since the AMBAG RTDM does not inherently account for the effects of many of these design principles, and the specific characteristics, locations, and timelines of these VMT-reducing strategies are uncertain, their additional impacts will need to be assessed at the individual project level. These factors will play a significant role in analyzing individual development projects, with the extent of their influence depending on the selected location and design features.

VMT Reducing Policies and Improvements

There are several approaches and programs that provide opportunities for VMT mitigation including:

- Transportation Demand Measures
- 2045 Regional Transportation Plan & the Sustainable Communities Strategy
- VMT Reducing Design Principles

### *Transportation Demand Measures (TDMs)*

VMT mitigation typically depends significantly on Transportation Demand Measures (TDMs). Generally, these measures encompass two primary strategies: policy-based strategies and infrastructure-related strategies. The California Air Pollution Control Officers Association (CAPCOA) guide for Quantifying Greenhouse Gas Mitigation Measures is one of the primary bases for estimating mitigation effects in California. The most recent version of CAPCOA's Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (Handbook) was published in October 2024[4]. While this resource is of great significance, caution is essential when applying it, especially as some measures were developed based on small sample sets. In addition, many measures are rooted in observations from densely urbanized regions. Depending on the chosen measures, they can pose challenges in terms of mitigation monitoring. Furthermore, they are often not favored by project applicants because of the potential need to be managed and paid for in perpetuity. Due to such constraints lead agencies tend to gravitate towards programmatic strategies for VMT mitigation. The measures[5] from the Handbook were reviewed to determine the most applicable measures for the County. It should be noted that these measures cannot be used in the absolute aggregate to reduce VMT impacts. While certain measures can be applied to specific projects, many are more effective when used systematically.

- *Integrate Affordable and Below Market Rate Housing (T-4):* This measure requires below market rate (BMR) housing. BMR housing provides greater opportunity for lower income families to live closer to job centers and achieve a jobs/housing match near transit. It is also an important strategy to address the limited availability of affordable housing that might force residents to live far away from jobs or school, requiring longer commutes. The quantification method for this measure accounts for VMT reductions achieved for multifamily residential projects that are deed restricted or otherwise permanently dedicated as affordable housing. Multifamily residential units must be permanently dedicated as affordable for lower income families. Lower-income is defined as 80 percent of area median income or below, and affordable housing as costing 30 percent of gross household income or less. This can decrease up to 28.6 percent of GHG emissions from project/site multifamily residential VMT
- *Provide Ridesharing Program (T-8):* This measure would implement a ridesharing program and establish a permanent transportation management association with funding requirements for employers. Ridesharing encourages carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips, VMT, and GHG emissions. This can decrease VMT by up to 8.0 percent of GHG emissions from project/site employee commute VMT.
- *Implement Subsidized or Discounted Transit Program (T-9):* This measure provides subsidized, discounted, or free transit passes for employees and/or residents. This can decrease VMT by up to 5.5%. To achieve the higher end of this reduction the project should be accessible either within 1 mile of high-quality transit service (rail or bus with headways of less than 15 minutes), 0.5 mile

[4] *California Air Pollution Control Officers Association (CAPCOA). Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Available at* https://www.caleemod.com/documents/handbook/full_handbook.pdf.

[5] The "T" references in these measures are sourced from the most recent version of CAPCOA's Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, published in January 2022.

of local or less frequent transit service, or along a designated shuttle route providing last-mile connections to rail service.

- *Provide Electric Vehicle Charging Infrastructure (T-14).* Install onsite electric vehicle chargers in an amount beyond what is required by the California Green Building Standards (CALGreen) at buildings with designated parking areas (e.g., commercial, educational, retail, multifamily). This can decrease VMT by up to 11.9 percent from vehicles accessing the commercial or multifamily housing building.
- *Limit Residential Parking Supply (T-15):* This measure will reduce the total parking supply available at a residential project or site. Limiting the amount of parking available creates scarcity and adds additional time and inconvenience to trips made by private auto, thus disincentivizing driving as a mode of travel. Reducing the convenience of driving results in a shift to other modes and decreased VMT, by up to 13.7% at the Project or site.
- *Unbundle Residential Parking Costs from Property Cost (T-16):* This measure unbundles, or separates, a residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost. On the assumption that parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces, this measure results in decreased vehicle ownership and, therefore, a reduction in VMT. This can decrease VMT by up to 15.7%. This measure should be practiced in areas where there is robust access to transit, bicycle and pedestrian facilities to facilitate utilization of alternative modes of transportation.
- *Improve Street Connectivity (T-17):* This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of vehicle intersections compared to the average intersection density in the U.S, reducing VMT by up to 30.0% within the plan area.
- *Provide Pedestrian Network Improvement (T-18):* This measure increases sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. Pedestrian improvements can reduce VMT up to 6.4%, particularly when new or improved sidewalks connect people to an existing network of pedestrian and transit facilities.
- *Construct or improve bike facility (T-19-A)*: This measure involves constructing or improving a single bicycle lane facility (limited to Class I, II, or IV) that connects to a larger existing bikeway network. Enhancing bicycle infrastructure can lead to a VMT reduction of 0.8% per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- *Construct or Improve Bike Boulevard (T-19-B):* This measure involves constructing or improving a single bicycle boulevard that connects to a larger existing bikeway network. Bicycle boulevard construction can lead to a VMT reduction of 0.2% per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- *Expand Bikeway Network (T-20):* This measure will increase the length of a city or community bikeway network. A bicycle network is an interconnected system of bike lanes, bike paths, bike routes, and cycle tracks. Enhancing a bicycle network can lead to a VMT reduction of 0.5% per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- *Implement Conventional Carshare Program (T-21-A):* This measure provides carshare access in the user's community by deploying conventional carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes. Implementing a carshare program can reduce VMT up to 0.15%.
- *Implement Electric Carshare Program (T-21-B): This measure will increase carshare access in the user's community by deploying electric carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes. This helps encourage transportation alternatives and reduces vehicle ownership, thereby reducing VMT, by up to 0.18% within the plan area.*

- *Implement Pedal, Non-Electric, Bikeshare Program (T-22-A):* This measure will establish a bikeshare program. Bikeshare programs provide users with on-demand access to bikes for short-term rentals. This program can reduce VMT by up to 0.02% within the plan area.
- *Implement a bike-share program (T-22-B)*: This measure involves establishing a bike-share program, providing users with on-demand access to bikes for short-term rentals. Bike-share programs can reduce VMT by up to 0.06% in the plan area. These programs are typically more effective in dense urban areas where short trips by car are common.
- *Implement Scooter-share Program (T-22-C):* Scooter-share programs provide users with on-demand access to electric scooters for short-term rentals. This program can reduce VMT by up to 0.07% in the plan area and are more effective in dense urban areas where short trips by car are common.
- *Provide Community-Based Travel Planning (T-23):* This measure will target residences in the plan/community with community-based travel planning (CBTP). CBTP is a residential based approach to outreach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing VMT. A CBTP can reduce GHG up to 2.3% in a plan area depending on the number of residents targeted.
- *Implement Market Price Public Parking On Street (T-24): This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers. Increasing the cost of parking increases the total cost of driving to a location, incentivizing shifts to other modes and thus decreasing total VMT to and from the priced areas, by up to 30.0% within the plan area.*
- *Extend transit network coverage or hours (T-25):* This measure involves expanding the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. This can decrease VMT by up to 4.6% for a plan area, particularly in more urbanized areas with frequent and reliable transit service.
- *Increase transit service frequency (T-26)*: This measure would increase transit frequency on one or more transit lines serving the plan/community. It can reduce passenger VMT by up to 11.3%.
- *Implement Transit-Supportive Roadway Treatments (T-27):* This measure implements transit-supportive treatments on the transit routes serving the plan/community. Transit-supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability. It can reduce passenger VMT by up to 0.6% in areas with frequent service.
- *Provide Bus Rapid Transit (T-28):* This measure will convert an existing bus route to a bus rapid transit (BRT) system. BRT can increase the transit mode share in a community due to improved travel times, service frequencies, and the unique components of the BRT system. This mode shift may reduce VMT by up to 13.8% within the plan area.
- *Reduce Transit Fares (T-29):* This measure will reduce transit fares on the transit lines serving the plan/community. A reduction in transit fares creates incentives to shift travel to transit from single-occupancy vehicles and other traveling modes, which can reduce VMT up to 1.2%.
- *Provide Transit Shelters (T-46):* For this measure, a local government or transit agency provides amenities that make it safer and more comfortable to wait for the bus. The two interventions that have proven to lead to changes in rider perceptions are adding bus shelters and adding real-time arrival information. Research into transit ridership shows that adding these amenities decreases both the real and the perceived wait time for riders, which impacts riders' willingness to ride, decreasing up to 0.32% VMT within the plan area.
- *Infill Development (T-55):* This measure accounts for the VMT reduction achieved by infill housing development programs that allow residents to live closer to downtown areas where there is greater access to jobs and activities. Residents living at infill development projects typically do not

need to travel as far to access essential destinations. This leads to up to 30% lower project or site based residential VMT.

- *Active Modes of Transportation for Youth (T-56):* This measure accounts for reductions in VMT achieved by projects that provide infrastructure to support any form of active transport among youth. Trips to school and extracurricular activities represent most of the everyday travel taken by youth. Thus, ensuring that children can use active transportation whenever possible can serve to reduce up to 22.2% of school commute based VMT.

These measures are for informational purposes only: the reduction in Vehicle Miles Traveled (VMT) resulting from implementing these measures can vary significantly based on local conditions, the extent of implementation, and how these strategies are integrated with other transportation and land use policies. While there are case studies supporting the high end of the ranges provided in the Handbook, given the complexity and variety of factors, VMT reduction would likely be closer to the low end of the range provided in the Handbook.

### Monterey County Code, Title 12, Vehicle and Traffic

MCC Chapter 12.80 Voluntary Automobiles Trip Reduction, outlines the requirements for the Facilities Trip Reduction Ordinance, which provides land use considerations to help achieve the overall goals of 1.6 percent per year trip reduction, 1.35 average vehicle ridership (AVR), or sixty (60) percent drive alone rate (DAR) for the County. The intent of this chapter is to ensure that new development, redevelopment, and expanse existing development contain the needed infrastructure and programs to, firstly, reduce the need to travel, and, secondly, to encourage alternative modes of travel. In particular, Section 12.80.050 – Responsibilities of residential developers and developments, requires that developers of all residential developments with 25 or more units to submit a Trip Reduction Checklist as part of the discretionary permit review process. The Checklist shall identify proposed design elements and facilities that encourage alternative transportation usage by visitors to the development.

### *2045 Metropolitan Transportation Plan & the Sustainable Communities Strategy*

As required by SB 375, AMBAG develops a Sustainable Communities Strategy (SCS) every four years as part of updating its Metropolitan Transportation Plan (MTP). The AMBAG MTP/SCS outlines a regional approach to reducing VMT. This approach emphasizes the integration of land use planning with transportation enhancements and incorporates the following goals and policies:

- Access and Mobility – Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region.
- Economic Vitality – Raise the region's standard of living by enhancing the performance of the transportation system.
- Environment – Promote environmental sustainability and protect the natural environment.
- Healthy Communities – Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation.
- Social Equity – Provide an equitable level of transportation services to all segments of the population.
- System Preservation and Safety – Preserve and ensure a sustainable and safe regional transportation system.

To achieve these goals the 2045 SCS considers various land use and transportation scenarios which are weighed against a variety of performance measures and measured against the goals outlined above. To

achieve the preferred scenario, affordable housing and land use strategies are employed that address the persistent jobs-housing imbalance in the region. The County's Housing Element is one of many housing elements in the region planning for increased affordable housing to address this imbalance.

## Policies and Multimodal Analysis

The following plans, policies, performance metrics, and goals are considered important to considering whether the proposed action would result in a conflict as described in (a) of the 2024 CEQA Statute Guidelines Appendix G Section XVII.

1. 2010 General Plan (Inland):
   The Monterey County General Plan is a guide for future development and land use in Monterey County, California. It sets rules and goals to help make sure that growth is safe, protects the environment, and meets the needs of the community. The Circulation Element of the General Plan identifies the general location and extent of existing and proposed major transportation facilities for vehicle, rail, air, water, and bicycle transportation.

   *The policies relating to transportation are shown in* Table *5* *along with an explanation of whether the Project conflicts with or supports each policy. The General Plan includes a number of policies related to level of service (LOS). However, because LOS is no longer considered to be an impact under CEQA those goals and policies are not included below as part of the transportation impacts analysis included here.*

2. Active Transportation Plan for Monterey County (2018), TAMC
   The 2018 Transportation Agency for Monterey County Active Transportation Plan (ATP) is an update of the 2011 Bicycle and Pedestrian Master Plan, which identified all existing and proposed bicycle and pedestrian facilities in Monterey County. This ATP identifies remaining gaps in the bicycle and pedestrian network and opportunity areas for innovative bicycle facility design. The vision for the ATP is that active transportation will be an integral, convenient and safe part of daily life in Monterey County for residents and visitors of all ages and abilities.

   *The proposed Project does not conflict with the ATP. As development is proposed for construction, the application will be reviewed for required roadway improvements, including consistency with the County ATP, and provide the necessary pedestrian and bicycle facilities improvements, and/or with applicability and assessment of impact fees. The Project would not interfere with, degrade, or prevent the implementation of existing or planned active transportation infrastructure and the opportunity sites do not physically conflict with or obstruct any existing or planned transit stops, stations, or active transportation corridors. Furthermore, approximately 92% of the identified opportunity sites are within a ½ mile vicinity of existing or planned bicycle facilities.*

3. Active Transportation Plan for Caltrans District 5 (2021), Caltrans
   The District 5 Active Transportation Plan (Plan) advances the Vision Statement and Goals in Toward an Active California, the statewide bicycle and pedestrian plan, and is part of a comprehensive planning process to identify locations with walking and bicycling needs in each Caltrans district across California. The Plan includes a prioritized list of bicycle and pedestrian needs along and across the state highway system to help identify opportunities to incorporate bicycle, pedestrian, and transit improvements into projects.

   *The proposed Project does not conflict with the ATP. As development is proposed for construction, the application will be reviewed for required improvements, including consistency with the District 5 ATP, and provide the necessary pedestrian and bicycle*

*facilities improvements, and/or with applicability and assessment of impact fees. The project would not interfere with, degrade, or prevent the implementation of existing or planned active transportation infrastructure and the opportunity sites do not physically conflict with or obstruct any existing or planned transit stops, stations, or active transportation corridors. .*

4. Fort Ord Regional Trail and Greenway
   The purpose of FORTAG is to provide an accessible multi-use path for recreation and active transportation for residents and visitors. FORTAG supports the following objectives that are relevant to the proposed Project:

   - Function as an active transportation artery for commuting and recreation, providing a safe, accessible, and separated alternative to motorized travel that reduces vehicle trips and associated emissions.
   - Connect people to open space and recreational activities from their homes, workplaces, and hospitality bases.
   - Enhance connections between Fort Ord, Monterey Peninsula, and Salinas Valley communities, and provide additional opportunities for physical exercise and stress reduction for residents and visitors.

   *The proposed Project does not conflict with the FORTAG plan. Opportunity sites are not directly adjacent to the proposed future trail system but could use the system.*

5. Marina-Salinas Multimodal Corridor Conceptual Plan (2015), TAMC

   The Marina-Salinas Multimodal Corridor Plan was developed in response to the need for a regional route through the former Fort Ord area that will increase roadway capacity by prioritizing high quality transit, bicycling and walking as viable alternatives to driving.

   *The proposed Project does not conflict with the Marina-Salinas Multimodal Corridor Conceptual Plan. The proposed Project proposes opportunity sites adjacent to the proposed multimodal corridor alignments and encourages the use of multimodal transportation options.*

6. Monterey Bay Area Rail Network Integration Study (2021), TAMC

   This plan envisions an integrated train and bus network to support regional growth and support state and federal climate action and equity goals. The Initial Service scenario creates a regular passenger rail connection between the Monterey Bay Area and San Francisco Bay Area and lays the foundation for future expansion. The phased scenario includes increased passenger rail service and bus connections. The Vision Service scenario is a long-term vision for rail service in Monterey County.

   *The project would not require changes to any of the rail service network infrastructure or services. Additional housing development in the UMC would not interfere with integrating train and bus network to support regional growth. Opportunity sites do not interfere with the existing and proposed intermodal station projects identified in this study and would not conflict with implementation of this study. The project would not conflict with any existing or future rail network pursuant to the Monterey Bay Area Rail Network Integration Study.*

7. Comprehensive Operational Analysis Final Network Plan (2022), MST

Developed by MST, this plan includes a preferred scenario that increases service frequency as well as the number of people located near transit. This service scenario was based on extensive public outreach and direction from the Board of Directors to focus a little more on ridership, to prioritize the travel needs of low-income communities, and to shift more service to Salinas and regional routes.

*The proposed project does not conflict with this plan because the project would not interfere with MST's ability to operate its services and implement various scenarios affecting service frequency and routes. The project also would not interfere with, degrade, or prevent the existing or planned transit infrastructure or service. Fifty-one of the 56 opportunity sites are within a 0.5-mile vicinity of a transit stop. The project would facilitate development of housing units near transit facilities and would benefit from the increased frequency of services and expanded routes proposed under this plan. Therefore, the project would be consistent with the intent of the Comprehensive Operational Analysis Final Network Plan.*

8. Transportation Agency for Monterey County Regional Transportation Plan (2022), TAMC
The Regional Transportation Plan (RTP) for Monterey County is a 20-year plan that outlines how to address the county's transportation needs and includes transportation projects to meet those needs. The following transportation policies are relevant to the proposed project.

- Increase affordability, accessibility and safety between key origins and destinations in the region.
- Reduce greenhouse gas emissions consistent with regional targets.

*The project would facilitate development of various income level housing throughout Monterey County. Increasing housing supply for all income levels, including affordable housing near transportation corridors would not conflict with the planned improvements in the RTP.*

9. Association of Monterey Bay Area Government Metropolitan Transportation Plan (2022), AMBAG
AMBAG is the Metropolitan Planning Organization (MPO) for the Monterey Bay Area and prepares the Metropolitan Transportation Plan (MTP) which is a coordinated 20-year plan outlining transportation needs for San Benito, Santa Cruz and Monterey Counties.

*The project would facilitate the development of various income level housing throughout Monterey County. Increasing housing supply for all income levels, including affordable housing near transportation corridors would not conflict with the planned improvements in the RTP.*

**Table 5** - Monterey County General Plan and Land Use Plan Consistency Analysis

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| Policy C-1.3: Circulation improvements that mitigate Traffic Tier 1 direct on-site and off-site project impacts shall be constructed concurrently (as defined in subparagraph (a) only of the definition for "concurrency") with new development. Off-site circulation improvements that mitigate Traffic Tier 2 or Traffic Tier 3 impacts either shall:<br>a. be constructed concurrently with new development, or<br>b. a fair-share payment pursuant to Policy C-1.8 (County Traffic Impact Fee), Policy C-1.11 (Regional Development Impact Fee), and/or other applicable | Consistent. The project could result in increased demand for on- and off-site circulation improvements due to future housing development. However, while the project plans for future growth, it does not propose any specific development projects within the UMC at this time. As individual developments are proposed, each application will be reviewed for applicability and assessed for any applicable impact fees or necessary improvements. Therefore, the project does not conflict with this policy. |

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| traffic fee programs shall be made at the discretion of the County. | |
| Policy C-2.2: Existing and proposed public transportation facilities shall be protected from the encroachment of incompatible land uses. | Consistent. Housing is a compatible land use with transit and affordable housing is often paired with transit facilities to improve access and mobility for households that have a lower rate of automobile ownership. The project includes planning for housing growth in areas served by alternative modes of transportation, including public transit and bicycle facilities. Site selection strategies focused on planning for growth in areas of UMC that are designated for growth, including in Community Areas, Rural Centers, areas designated with Affordable Housing Overlays and or within proximity to incorporated cities. Therefore, the location of housing provided for in the project there is no conflict with this policy. |
| Policy C-2.3: The safety standards established by transportation-related agencies shall be supported and be used to guide land use to ensure the safe operation of the County's transportation systems. | Consistent. There are no inherent transportation safety issues with high density housing projects. As development is proposed, each project will be reviewed according to adopted safety standards and they are required to comply with applicable County roadway design standards, Caltrans design and access requirements for state facilities, ADA accessibility requirements, emergency access standards, and other applicable transportation engineering and safety standards during subsequent discretionary review. Compliance with these standards would help ensure that future development provides safe access and circulation for motorists, pedestrians, bicyclists, transit users, and emergency responders and would not interfere with the safe operation of the County's transportation system. The HEU6 includes adoption of objective design standards for projects streamlining under the Objective Process to follows. However, they do not include specific design criteria that would conflict with safety standards. No conflict would occur. |
| Policy C-2.4: A reduction of the number of vehicle miles traveled per person shall be encouraged. | Consistent. Occupants of housing projects with an affordability component exhibit lower vehicle ownership rates and 100% affordable housing projects are generally presumed to have a less than significant impact on VMT per statewide guidance and standards. As described in Section 4.16.4, Thresholds of Significance, OPR Technical Advisory includes affordable housing screening, where residential projects consisting of deed-restricted affordable housing for lower-income households may be presumed to have a less than significant VMT impact because lower-income household generally generate less VMT than regional average, and California Air Pollution Control Officers Association (CAPCOA) Guide for Quantifying guide for Quantifying Greenhouse Gas Mitigation Measures, one of the primary bases for estimating mitigation effects in California, identifies integrating affordable and below-market-rate housing (Measure T-4) as potentially reducing up to 28 percent of greenhouse gas (GHG) emissions from multi-family residential projects. The HEU6 promotes high density housing with affordability components, therefore encourages a reduction of VMT per person. The project would not conflict with this policy. |
| Policy C-2.5: Overall land use patterns that reduce the need to travel by automobile shall be encouraged. | Consistent. The proposed HEU6 includes land uses within proximity to bicycle facilities and transit stops and therefore |

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| | supports this policy. Additionally, there are a number of policies within the plan supporting housing development near public transit facilities including policies programs H-2.G, H-5.B. and Policy H-3.8. Program H-2.G includes providing incentives and density bonus concessions for developments that provide transit-oriented development (TOD). Policy H-3.8 states that the County will explore collaboration with cities to prepare growth strategies that provide for housing near jobs and transit. Program H-5.B commits to identifying sites that comply with SB-10 and amending development standards to facilitate development in transit rich areas. The proposed project does not conflict with this policy. |
| Policy C-2.7: New development shall be located and designed with convenient access and efficient transportation for all intended users and, where possible, consider alternative transportation modes. | Consistent. The project includes land uses within proximity to bicycle facilities and transit stops and therefore supports this policy (Refer to Figures 4.16-1 through 4.16-4).Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G, and H-5.B and program H-3.8. The proposed project does not conflict with this policy. |
| Policy C-4.2: All new road and interior circulation systems shall be designed, developed, and maintained according to adopted County standards or allowed through specific agreements and plans. | Consistent. The project is an update to the County's Housing Element. Any development proposing new roads or interior circulation systems would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |
| Policy C-4.3: The needs of bicyclists and pedestrians, as well as provisions for utilities and drainage, shall be considered and, where appropriate, provided in all public rights-of-way in a manner that minimizes impacts on adjacent land uses. | Consistent. The project is an update to the County's Housing Element. Any development proposing new roads or interior circulation systems would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |
| Policy C-4.5: New public local and collector roads shall be located and designed to minimize disruption of existing development, discourage through auto traffic and provide for bicycle and pedestrian traffic within the right-of-way. | Consistent. The project is an update to the County's Housing Element and does not include any new roadways at this time. Any development proposing new roads would be reviewed for consistency according to adopted County standards at the time of application. The project does not conflict with this policy. |
| Policy C-4.6: Driveways, mid-block access points, intersections and on-street parking along major roads and highways shall be minimized and consolidated. | Consistent. The project is an update to the County's Housing Element. Any development including new driveways would be reviewed for site access and crossings at the time of application. The project does not conflict with this policy. |
| Policy C-4.7: Where appropriate and sufficient public right-of-way is available, bicycle paths shall be separated from major roads and highways and be provided between adjacent communities. | Consistent. The project is an update to the County's Housing Element. Any development proposing new bicycle facilities and right-of-way would be reviewed for at the time of application. The project does not conflict with this policy. |

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| Goal C-5: Maintain and enhance a system of scenic roads and highways through areas of scenic beauty without imposing undue restrictions on private property or constricting the normal flow of traffic. | Consistent. There are opportunity sites that are adjacent to designated scenic roads and highways and areas designated as having scenic sensitivity. However, with proper grading and site and design elements, those opportunity sites would be able to be developed without having significant impacts on scenic vista. Maintaining adequate traffic flow and level of service would be reviewed for consistency according to County standards and regulations at time of application. The project does not conflict with this policy. |
| Policy C-5.4: Land use controls shall be applied or retained to protect the Scenic Highway Corridor and to encourage sensitive selection of sites and open space preservation within such areas. Where land is designated for development at a density that would create a substantial adverse visual impact, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the Scenic Highway corridor. | Consistent. This policy protects Scenic Highway Corridors by applying land use controls and to encourage sensitive selection of sites and open space preservation. From a transportation and circulation perspective, the project is consistent because it does not propose any physical alterations to the designated scenic highway right-of-way, nor does it introduce circulation infrastructure that would conflict with the established scenic corridor boundaries or controls. The detailed analysis of the project's visual compatibility and consistency with the Scenic Highway Corridor is addressed in the PEIR Section 4.1, Aesthetics. Project-specific impacts would be reviewed for consistency with County regulations at time of application. The project does not conflict with this policy. |
| Policy C-6.2: Major traffic generating events, activities and development shall provide facilities adequate to meet the anticipated demand and to encourage the use of mass transit options, consistent with the Monterey-Salinas Transit's Designing for Transit manual. | Consistent. The project is an update to the County's Housing Element, however as specific developments are proposed there are sufficient review mechanisms in place to review the proposed facilities for adequacy of demand. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including programs H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| Policy C-6.3: The County shall encourage new development to concentrate along major transportation corridors and near cities to make transit services to these areas more feasible. | Consistent. Approximately 93 percent of the proposed housing units for housing are within 0.5 mile of transit stops. Although these transit facilities do not qualify as high-quality transit stops or corridors pursuant to the CEQA Guidelines, their presence demonstrates that transit service is available to these housing units. The HEU6 also includes opportunity sites located along major transportation corridors and in proximity to the Cities of Salinas, Carmel-by-the-Sea, Marina, and Monterey. In addition, one opportunity site is located within the incorporated limits of the City of Marina. Therefore, the project does not conflict with this policy. |
| Policy C-6.5: The County shall encourage use of public transit and alternative modes of transportation through land use designations and zoning which cluster employment centers with a mix of other uses, and project design that incorporates carpool areas, "park and ride" facilities and similar incentives. | Consistent. The project proposes land uses within 0.5 mile proximity to bicycle facilities and transit stops for most opportunity sites. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including programs H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| Policy C-7.1: The County shall prohibit land use activities that interfere with the safe operation of aircraft. | Consistent. Housing is proposed within the Airport Influence Area for the Marina Municipal Airport and the Monterey Regional Airport. Opportunity Sites 46, 47, and 52 are located within the Airport Influence Area (AIA) of the Monterey Regional Airport Land Use Compatibility Plan (ALUCP) and Opportunity Sites 31 and 53 are located within the AIA of the Marina Municipal Airport ALUCP. The HEU6 |

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| | proposes split zoning for Opportunity Sites 46, 47, and 52 to minimize safety and environmental impacts. Opportunity Sites 31, 47, 52, and 53 are within Safety Zone 7 (AIA). Opportunity Site 46 is partially in Safety Zone 4 – Outer Approach/Departure Zone. Split zoning is proposed for Opportunity Site 46 to rezone portions of the site that are suitable for development and consistent with Part 77 regulations in addition to the density requirements of Safety Zone 4. Within Safety Zone 4, residential development is limited to one dwelling unit per two acres, and additional requirements apply, including airport disclosure notices and airspace review for structures exceeding 70 feet in height. Split Zoning is also proposed for Opportunity Site 47 to avoid impacts on Part 77 Airspace. Development of housing on these opportunity sites within ALUCPs are subject to compliance with applicable compatibility standards, including airport disclosure requirements, airspace review for structures exceeding 100 feet in height, restrictions related to Federal Aviation Administration (FAA) Part 77 Airspace surfaces, and ALUC review for uses involving vulnerable occupants within specified distances from runways. Future development on these sites would remain subject to ALUC review, airport disclosure requirements, airspace compatibility standards, and applicable FAA height restrictions. The HEU6 would allow development in a manner that would not interfere with the safe operation of aircraft. Therefore, the project does not conflict with this policy. The project does not conflict with this policy. |
| Policy C-7.2: Land uses in areas that may be impacted by airport operations shall be compatible with those operations and incorporate measures to mitigate potential safety and noise impacts on those uses. | Consistent. Refer to analysis for Policy C-7.1. Additionally, Opportunity Sites 46, 47, and 52 are outside Monterey Regional Airport's outermost noise contour (65 CNEL), and Opportunity Sites 31 and 53 are outside the outermost noise contour (55 CNEL). Therefore, noise generated by the airport would be less than 65 CNEL at the nearest receptor, consistent with the County's acceptable ambient noise levels for multi-family residential, and impacts would be less than significant. Additionally, the Airport Land Use Commission will recommend a recorded deed notice requirement as a condition of approval pertaining to safety and noise, as applicable. The project does not conflict with this policy. |
| Policy C-7.4: Land uses in the vicinity of public airports shall be consistent and compatible with the airport comprehensive land use plans. | Consistent. As discussed above and in further detail in Section 4.9, Hazards and Hazardous Materials, Opportunity Sites 46 and 47 will be split zoned to avoid impacts on Safety Zone 4 and Part 77 Airspace and ensure compatibility with safety requirements of the Monterey Regional Airport ALUCP. Therefore, the project is not inconsistent with any airport land use plans. |
| Policy C-8.4: The County shall encourage transit-oriented development around existing and future rail, light rail, or bus rapid transit stations. | Consistent. The project proposes land uses within proximity to future rail stations in Castroville and Salinas. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including policy H-2.G, H-3.8, and H-5.B. The project does not conflict with this policy. |

| Land Use Element | |
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| LU-1.4: Growth areas shall be designated only where an adequate level of services and facilities such as water, sewerage, fire and police protection, transportation, and schools exists or can be assured concurrent with growth and development. Phasing of development shall be required as necessary in growth areas in order to provide a basis for long-range services and facilities planning. | Consistent. The proposed opportunity sites are located along existing transportation facilities or near such facilities. As development is proposed, the County will review applications and require transportation facilities consistent with current access and mobility standards and regulations. The project does not conflict with this policy. |
| LU-1.19: Community Areas, Rural Centers and Affordable Housing Overlay districts are the top priority for development in the unincorporated areas of the County. Outside of those areas, a Development Evaluation System shall be established to provide a systematic, consistent, predictable, and quantitative method for decision-makers to evaluate developments of five or more lots or units and developments of equivalent or greater traffic, water, or wastewater intensity.[…] | Consistent. The HEU6 proposes additional housing units to priority development areas such as Community Areas, Rural Centers, and Affordable Housing Overlays. Although there are opportunity sites outside of these areas, the project includes General Plan amendments to designate opportunity sites as priority development areas which are not subject to Development Evaluation System requirements. The HEU6 provides a systematic, consistent, predictable, and quantitative analysis of housing needs and challenges based on affordable housing requirements. The project does not conflict with this policy. |
| LU-2.4: Areas designated for residential use shall be located with convenient access to employment, shopping, recreation, and transportation. Higher density residential areas should be located with convenient access to public transit. | Consistent. The HEU6 provides for opportunity sites near transportation facilities and provides detailed information on the number of jobs within a 45-minute commute by transit or vehicle. To the extent feasible and within the constraints of where the County has land use authority, opportunity sites are located near transit. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G and H-5.B, and policy H-3.8. The project does not conflict with this policy. |
| LU-2.5: Adequate circulation rights-of-way shall be delineated within each residential area. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any necessary right-of-way needs. The project does not conflict with this policy. |
| Conservation and Open Space Element | |
| OS-9.2: Development shall be directed toward cities, Community Areas, and Rural Centers where energy expended for transportation and provision of services can be minimized. | Consistent. The HEU6 prioritizes development within existing and planned Community Areas, Rural Centers, Affordable Housing Overlays and in areas near cities where transportation facilities and services already exist. The project does not conflict with this policy. |
| OS-9.6: Development shall incorporate features that reduce energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design as appropriate. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed, County staff will review the application for consistency with access and transportation regulations and standards including any active transportation facilities. The project does not conflict with this policy. |
| Safety Element | |
| S-4.10: The County shall require the creation of road maintenance agreements for all new private subdivision roads. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed, County staff will review the application for consistency with access and transportation regulations and standards including any necessary right-of-way needs. If new roadways are proposed as part of the development, the County would require road maintenance agreements for |

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| | new private subdivision roads. The project does not conflict with this policy. |
| S-5.17: Emergency Response Routes and Street Connectivity Plans shall be required for Community Areas and Rural Centers, and for any development producing traffic at an equivalent or greater level to five or more lots/units. Said Plan shall include:<br>a. Roadway connectivity that provides multiple routes for emergency response vehicles.<br>b. Primary and secondary response routes in Community Areas and Rural Centers.<br>c. Secondary response routes, which may include existing roads or new roads required as part of development proposals.<br>The County shall review said plans in coordination with the appropriate Fire District. | Consistent. This policy mandates the creation of Emergency Response Routes and Street Connectivity Plans for specific areas and developments of five or more units. The Safety Element is currently being updated to comply with SB 99, AB 747, and AB 1409 to evaluate evacuation routes, their viability and capacity under a range of hazard scenarios, identify evacuation locations, and identify residential areas without two points of egress. The existing area and master plans evaluate circulation in those plan areas. The County's Emergency Operations Plan also discusses evacuation procedures and resources to address various types of hazards. The Mult-Jurisdictional Hazard Mitigation Plan is incorporated by reference into the County's Safety Element and it also discusses evacuation strategies in the County.<br>New residential development would be subject to the standard California Building Code, Fire Code, and local fire districts with jurisdiction reviews for secondary access, turnarounds, and connectivity at the time of application. Additionally, the project's impacts regarding wildfire and emergency evacuation (Thresholds 6 and 7) are discussed in Section 4.19, Wildfire. The project does not conflict with this policy. |
| **Public Services Element** | |
| PS-1.1: Adequate Public Facilities and Services (APFS) requirements shall:<br>a. Ensure that APFS needed to support new development are available to meet or exceed the level of service of "Infrastructure and Service Standards" (Table PS-1) concurrent with the impacts of such development;<br>b. Encourage development in infill areas where APFS are available, while acknowledging the rights of property owners to economically viable use of existing legal lots of record throughout the county; and<br>c. Seek to achieve acceptable level of service (LOS) standards through improvements funded by fair-share impact fees and planned capital improvements (CIFPs). | Consistent. The proposed project would continue to be subject to the APFS requirements as outlined in Table PS-1. Opportunity sites have been selected through a comprehensive screening process intended to identify locations where additional residential capacity could be accommodated, existing or planned availability of adequate infrastructure were one of the site selection criteria. Although LOS is no longer a CEQA issue, therefore, not addressed in this PEIR, it is noted that the County Public Works, Facilities, and Parks, would continue to prioritize roadway improvements based on LOS methodology, and each development project would be required to provide its fair-share impact fees to roadway improvements, including but not limited to planned capital improvements. Additionally, Table PS-1 requires that road intersection level of service, Improvements to be LOS D for Rural Centers and Community Areas. For Rural Centers, Table PS-1 also includes a footnote that states "Development in Rural Centers may proceed, even if the operating level of service is lower than the applicable LOS standard on adjacent roads, if the certified Housing Element in effect at the time requires that the land in question be made available for development to meet the County's Regional Housing Needs Allocation. Development will be required to participate in any applicable regional or local road impact fee program once adopted." The HEU6 provides for meeting the RHNA and therefore falls within the scope of this note. The project does not conflict with this policy. |
| **Carmel Valley Master Plan** | Opportunity Sites 17, 18, 19, 20, 21, 22, 23, 35, 36, 37, 38, 54, 55, 56 |

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| CV-2.1: Public transit should be explored as an alternative to the use of private automobiles and to help preserve air quality. Whenever feasible all new development shall include a road system adequate not only for its internally generated automobile traffic but also for bus (both transit and school), pedestrian, and bicycle traffic, which should logically pass through or be generated by the development. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including right-of-way allocation. The project does not conflict with this policy. |
| CV-2.5: Circulation in the village should emphasize pedestrian access. Walkways and paths are to be provided rather than conventional sidewalks. Pedestrian walkways should be used to provide access among new or remodeled commercial and other higher density uses. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including providing pedestrian access. Opportunity Site 55 is the only opportunity site that is located in Carmel Valley Village and would therefore be subject to this Policy. Each development application would be reviewed and applicable walkways and paths would be provided, rather than conventional sidewalks, if deemed necessary by the County. The proposed project does not conflict with this policy. |
| CV-2.6: Multiple driveway accesses to Carmel Valley Road should be discouraged. Approval of future development of land having frontage on Carmel Valley Road must be conditioned upon minimizing access to Carmel Valley Road, or denying it if access is otherwise available. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including driveway placement. The project does not conflict with this policy. |
| CV-2.14: New major developments with access adjacent to Carmel Valley Road shall be required to provide space for the transit buses to stop, the parking of cars, and facilities for the safe storage of bicycles. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including right-of-way allocation. The project does not conflict with this policy. |
| CV-3.14: Wherever possible a network of shortcut trails and bike paths should interconnect neighborhoods, developments, and roads. These should be closed to motor vehicles and their intent is to facilitate movement within the Valley without the use of automobiles. | Consistent. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any active transportation facilities, such as trails and bike paths. Each housing project are required to coordinate with the County Public Works, Facilities, and Parks, to provide the necessary trails and bike paths to connect neighborhoods and roads. Furthermore, the County Public Works, Facilities, and Parks has ongoing planning activities to provide improved active transportation connectivity including coordination with TAMC and Caltrans ATP planning processes. The project does not conflict with this policy. |
| Fort Ord Master Plan | Opportunity Sites 31, 47 |
| Fort Ord Master Plan Objective E: Coordinate the location, intensity, and mix of land uses with alternative transportation goals and transportation infrastructure.<br>Residential Land Use Policy E-1: The County of Monterey shall make land use decisions that support transportation alternatives to the automobile and encourage mixed-use projects and the highest-density residential projects along major transit and public transportation routes.<br>Program E-1.1: The County of Monterey shall prepare one or more specific plans for the UC MBEST Cooperative Planning District. | Consistent. The County has ongoing planning activities to provide improved transportation connectivity including coordination with other jurisdictions in the Fort Ord planning area, CSUMB, TAMC and Caltrans. The project does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations including connectivity to the former Fort Ord planning area. Additionally, there are a number of policies within the HEU6 supporting housing development near transit including program H-2.G and H- |

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| Program E-1.2: The County of Monterey shall prepare one or more specific plans for the East Garrison District and incorporate provisions to support transportation alternatives to the automobile.<br>Program E-1.3: The County of Monterey shall encourage the development of an integrated street pattern for new developments which provides linkages to the existing street network and discourages cul-de-sacs or dead-end streets. | 5.B, and policy H-3.8. The project does not conflict with this policy. |
| Fort Ord Master Plan Fire, Flood, and Emergency Management Policy A-1: The county shall reduce fire hazard risks to an acceptable level by inventorying and assigning risk levels for wildfire hazards and regulating the type, density, location, and/or design and construction of new developments, both public and private. Program A-1.1: The County shall incorporate the recommendations of the Monterey County Regional Fire District for all residential, commercial, industrial, and public works projects to be constructed in high fire hazard areas at the former Fort Ord before a building permit can be issued. Such recommendations shall be in conformity with the current applicable Uniform Building Code Fire Hazards Policies. These recommendations should include standards of road widths, road access, building materials, distances around structures, and other standards for compliance with the UBC Fire Hazards Policies. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including roadway design. The project does not conflict with this policy. |
| Fort Ord Master Plan Transportation Demand Management Policy A-1: TDM programs shall be encouraged.<br>Program A-1.1: Promote TDM programs at work sites. Specific measures that can be pursued at the work site include: compressed work weeks, staggered/flexible work hours, telecommuting, on-site ridesharing, public transit subsidies, guaranteed ride home, bicycle facilities, and parking pricing.<br>Program A-1.2: Promote TDM programs in residential developments, retail centers, and other activity centers.<br>Program A-1.3: Require new development to incorporate design features that will strengthen TDM programs.<br>Program A-1.4: Enforce Congestion Management Plan trip reduction programs. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for opportunities for TDM. The project does not conflict with this policy. |
| Fort Ord Master Plan Land Use and Transportation Policy A.1: Each jurisdiction with lands at former Fort Ord shall coordinate land use and transportation planning both internally and with adjacent jurisdictions consistent with the Reuse Plan circulation framework.<br>Program A-1.1: Each jurisdiction shall support development of a travel demand model covering lands at former Fort Ord to help evaluate the relationship between land use and transportation system.<br>Program A-1.2: Each jurisdiction with lands at former Fort Ord shall require new developments to conduct a traffic analysis to determine impacts on traffic conditions and require measures, such as TDM programs and traffic impact fees, to mitigate these impacts. | Consistent. Opportunity Sites 31 and 47 are within the Fort Ord Master Plan area and already served by the existing roadway network, and would not modify the overarching circulation framework. The project used AMBAG RTDM for VMT analysis, calibrating and modifying to accommodate the project-specific conditions, which helped evaluate the relationship between land use and transportation system, and satisfying the intent of regional modeling coordination.<br>AMBAG maintains the RTDM in coordination with the cities and counties, including the County of Monterey. As part of the Metropolitan Transportation Plan/Metropolitan Transportation Improvement Program, AMBAG incorporates all approved projects into the RTDM and keep land use and transportation facility data current. Future development on these sites will be subject to project-level, non-CEQA LOS traffic assessment under local regulations to evaluate localized traffic conditions and identify necessary roadway improvements. Future projects will also be |

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| | required to implement TDM programs and pay applicable traffic impact fees. Project-level VMT reduction TDMs are separately addressed under Section 4.16.5.2 (Threshold 2). The project does not conflict with this policy. |
| Fort Ord Master Plan Land Use and Transportation Policy A.2: The transportation system to serve former Fort Ord lands shall be designed to reflect the needs of surrounding land uses, proposed densities of development, and shall include streets, pedestrian access, bikeways and landscaping as appropriate. | Consistent. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including any required active transportation facilities. The project does not conflict with this policy. |
| Fort Ord Master Plan Air Quality Policy A-3: Integrate the land use strategies of the California Air Resources Board's publication, "The Land Use Air Quality Linkage: How Land Use and Transportation Affect Air Quality," into local land use decisions. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to minimize impacts on VMT and air quality. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. The project does not conflict with this policy. |
| Fort Ord Master Plan Air Quality Program A.3-1: The County shall plan and zone properties, as well as review development proposals to promote the Land Use-Air Quality linkage. This linkage includes, but is not limited to, enhancement of Central Business Districts, compact development patterns, residential densities that average above seven dwelling units per acre, clustered employment densities and activity centers, mixed use development, and integrated street patterns. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to minimize impacts on VMT and air quality. The resulting opportunity sites were sited based on these principles and the constraints as described in the HEU6. Additionally, the Fort Ord Master Plan designated properties for development or development with restrictions. The opportunity sites located in this planning area are consistent with development envisioned in the Master Plan. Additionally, as development is proposed the County will review the applications for consistency with this policy including integrated street patterns. The project does not conflict with this policy. |
| Fort Ord Master Plan Program A-3.2: The County shall zone high density residential and employment land uses to be clustered in and near activity centers to maximize the efficient use of mass transit. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to maximize the use of transit. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. Additionally, the HEU6 includes Implementation Program H-1.C, Energy Efficiency and Conservation for Goal H-1 which includes promoting transit-oriented, including active transportation, and mixed-use development in Community Areas and Rural Centers near activity centers and transit routes to minimize vehicle trips and transportation energy consumption. Program H-2.G, Comprehensive Suite of Incentives/Concessions for Developers, also include providing TOD of affordable housing near transit hubs. The project does not conflict with this policy. |
| Fort Ord Master Plan Residential Land Use Policy E-1: The County of Monterey shall make land use decisions that support transportation alternatives to the automobile and encourage mixed-use projects and the highest-density residential projects along major transit and public transportation routes. | Consistent. The HEU6 considered all reasonable opportunities and constraints as well as best practice principles regarding where to locate housing to maximize the use of transit. The resulting opportunity sites were located based on these principles and the constraints as described in the HEU6. Additionally, the HEU6 includes Implementation Program H-1.C, Energy Efficiency and Conservation for Goal H-1 which includes promoting transit-oriented, including active transportation, and mixed-use development in Community Areas and Rural Centers near activity centers and transit routes to minimize vehicle trips |

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| | and transportation energy consumption. Program H-2.G, Comprehensive Suite of Incentives/Concessions for Developers, also include providing transit-oriented development (TOD). The project does not conflict with this policy. |
| Fort Ord Master Plan Residential Land Use Policy E-3: In areas of residential development, the County of Monterey shall provide for designation of access routes, street and road rights-of-way, off-street and on-street parking, bike paths, and pedestrian walkways.<br>Program E-3.1: The County of Monterey shall delineate adequate circulation rights-of-way to and within each residential area by creating circulation rights-of-way plan lines.<br>Program E-3.2: The County of Monterey shall prepare pedestrian and bikeway plans and link residential areas to commercial development and public transit. | Consistent. The County has ongoing planning activities to provide improved active transportation connectivity including coordination with TAMC and Caltrans ATP planning processes. The project does not provide for design of each opportunity site, however, as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including roadway design and multimodal circulation and access. The Master Plan envisioned development to be comprehensively planned alongside transportation infrastructure. The project does not conflict with this policy. |
| Greater Monterey Peninsula Area Plan | Opportunity Sites 40, 45, 46, 52 (Opportunity Site 53 is located within City of Marina city limits). |
| GMP-2.4: To minimize traffic safety hazards, creation of new direct access points from single-family residences onto Highway 68 or Laureles Grade shall be prohibited, unless there is no other feasible access. | Consistent: The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards including not creating new direct access points from single-family residences onto Highway 68 or Laureles Grade, unless there is no other feasible access. Opportunity Site 52 is the only site that abuts Highway 68. Access to the site is anticipated to be via Olmstead Road with the potential for an alternative access point for emergency access only. The proposed project does not conflict with this policy. |
| GMP-2.8: Development directly beneath runway approaches of the Monterey Peninsula Airport and Marina Municipal Airport shall:<br>a. be of low intensity,<br>b. not generate electrical interference to radio communication between pilots and the air traffic control tower,<br>c. not contain sources of glare which would blind or confuse pilots, and<br>d. be required to grant aviation easements to the Monterey Peninsula Airport District or other appropriate entity as a condition of development approval. | Consistent: Refer to analysis in C-7.1 and C-7.2 for additional information. The proposed project would not conflict with this policy. |
| Greater Salinas Area Plan | Opportunity Sites 1, 2, 3, 4, 5, 6 |
| GS-2.2: The County shall work with the City of Salinas to design a bypass roadway that provides an alternative route of traffic from SR-101 to Reservation Road along the west side of the City of Salinas (a.k.a. West Side Bypass) and also preserves as much agricultural land west of the City of Salinas as possible. | Consistent. The proposed project would not impede the County's ability to work with the City of Salinas to design a bypass roadway that provides an alternative route of traffic from U.S. Route 101 to Reservation Road. The proposed project would not conflict with this policy. |
| GS-2.3: The SR-101 bypass shall be designated a scenic highway. The bypass design shall incorporate sound deflection berms with appropriate landscaping and such measures shall be held consistent with its "scenic highway" designation. | Consistent. The proposed project would not prevent or obstruct with the County's plan to designate the U.S. Route 101 bypass as a scenic highway. The proposed project would not conflict with this policy. |
| Toro Area Plan | Opportunity Site 24 |

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| T-2.3 Continue to work with the state, local agencies, and citizens groups to alleviate traffic congestion while maintaining the scenic beauty of Highway 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following measures:<br>a. coordination with Caltrans and TAMC for the construction of a four-lane facility between the Toro interchange and State Route 218; and<br>b. construction of bus stops, pull-outs, and shelters where needed. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable. The project is a policy plan that would allow future development, and coordination with Caltrans and TAMC for improving Highway 68 is not part of the project. Opportunity Site 24 is within the Toro Area Plan, and although it is within proximity, it does not abut Highway 68, and construction of bus stops, pull-outs, and shelters along Highway 68 would not be required. The proposed project would not conflict with this policy. |
| T-2.5 Fair-share financial contributions from each new development in the Toro Planning Area shall be required to expedite funding and construction of Highway 68 improvements. | Consistent. The proposed project would be subject to fair-share financial contribution during individual project application process. The proposed project would not conflict with this policy. |
| T-3.1 Within areas designated as "visually sensitive" on the Toro Scenic Highway Corridors and Visual Sensitivity Map (Figure 16), landscaping or new development may be permitted if the development is located and designed (building design, exterior lighting, and siting) in such a manner that will enhance the scenic value of the area. Architectural design consistent with the rural nature of the plan area shall be encouraged. | Consistent. The only opportunity site in the Toro Area Plan is Opportunity Site 24. This site is not designated as "visually sensitive" on the Toro Scenic Highway Corridors and Visual Sensitivity Map (Figure 16). The proposed project would not conflict with this policy. |
| North County Land Use Plan (Coastal) | Opportunity Site 48 |
| General Policy 3.1.2 (5). The major arterial roads in North County should be upgraded as necessary to serve the planned growth of North County. Other local, rural roads should be upgraded only as necessary to serve local traffic and not through-traffic demand. | Consistent. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable, which may include upgrading major arterial roads and other local roads. The proposed project would not impede the County's ability to upgrade County roadways. The proposed project would not conflict with this policy. |
| 6. New development in rural areas should be located in areas with sufficient road capacity to accommodate additional transportation demand. Where necessary, the capacities of roads and public transit systems should be expanded to serve the transportation demand of areas specifically planned for concentrated development. In areas with highly congested traffic conditions, coastal-dependent development generating low volumes of traffic shall be preferred. | Opportunity Site 48 is the only site within the North County (Coastal) Land Use Plan (LUP) and this site is fronted by Hall Road to the south and Sill Road to the north. The plan does not provide for design of each opportunity site, however as development is proposed County staff will review the application and the project would be subject to appropriate traffic improvements, impact fees, and fair-share funding, as applicable, to provide sufficient road capacity. There is also a bus stop less than 0.25 mile from the opportunity site. Therefore, the proposed project would not conflict with this policy. |
| Carmel Area Land Use Plan | Opportunity Sites 16 and 43 |
| 3.1.3 SR-1 and Transportation Policies<br>1. To conform to the Coastal Act, most remaining highway capacity should be reserved for coastal priority uses: recreation and visitor-serving facilities, agriculture, and coastal-dependent industry. Commitment to further residential development through subdivision should be extremely limited. Traffic shall be monitored in order to provide a basis for decision-making. | Consistent. Opportunity Site 16 in the Carmel Area LUP is adjacent to SR-1 and proposes HDR/30 zoning with a maximum of 30 units per acre. The policy states that commitment to further residential development through subdivision should be extremely limited, however, the project does not inherently conflict with the Coastal Act's highway capacity policy at this programmatic level. The existing land use is medium density residential and the site is currently developed with an abandoned convalescent |

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| | home. The project is a policy plan and does not actively propose a subdivision and would not displace any coastal priority uses. Therefore, the proposed project would not conflict with this policy. |
| 3.1.3 SR-1 and Transportation Policies<br>7. The number of private roads and recreational access road entrances off SR-1 should be limited whenever possible for traffic safety and management purposes. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including limiting access via SR-1 for safety and management purposes. The proposed project does not conflict with this policy. |
| 3.1.3 SR-1 and Transportation Policies<br>9. Major development projects – both residential and recreation and visitor-serving, including significant expansion of existing facilities – should be required to contribute their "fair-share" toward improvements of SR-1 required as a result of traffic generated by the particular project. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including contributing their fair-share toward improvements of SR-1. The proposed project does not conflict with this policy. |
| Castroville Community Plan[6] | Opportunity Sites 11, 12, 13, 14 15, 30, 41 |
| Goal 3: Promote the redevelopment of the downtown area to create pedestrian friendly, mixed-use areas that positively contribute to the community's character and sense of place.<br>Policy 3.3 – Pedestrian and bicycle connections shall be created between the downtown, Castro Plaza, slough enhancement areas, the Commuter Train Station Area, the high school, and other portions of the community to promote linkages and improve the pedestrian and bicycle accessibility of the community. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including providing pedestrian and bicycle connections where needed and required to promote linkages and improve the pedestrian and bicycle accessibility of the community. The proposed project does not conflict with this policy. |
| Goal 8: Provide safe and convenient access to the new train station for the existing community and commuters.<br>Policy 8.1: The Community Plan circulation improvement program shall be implemented, including installing an intersection improvement project on SR-156 and realigning Castroville Boulevard.<br>Policy 8.2: Roadways in the existing community shall be extended to provide access to the train station and include drop off facilities.<br>Policy 8.3: A safe and attractive pedestrian/bike underpass under the railroad tracks to connect the train platform to the parking facilities on the east side shall be provided. | Consistent. As development is proposed County staff will review the application for consistency with access and transportation regulations and standards. Each development project in Castroville is required to contribute to applicable regional and local development impact fees program to provide safe and convenient access for the community, which may include the listed improvements in these policies related to Goal 8 or other similar improvements. The Caltrans Hwy 156/Castroville Boulevard interchange improvements have been approved. The train station is in the coastal one and the Castroville Community Plan is not certified by the Coastal Commission. The County is in the process of updating the Community Plan including amending circulation policies. As such, the proposed project does not conflict with this policy. |
| Goal 9: Create a safe and convenient pedestrian and bicycle system that connects local and regional destinations.<br>Policy 9.1: Safe pedestrian and bicycle crossings shall be provided at major roadways and the railroad facilities.<br>Policy 9.2: Traffic calming measures shall be implemented to create a safe, pedestrian friendly downtown area. | Consistent. The HEU6 does not provide for design of each opportunity site, however as development is proposed County staff will review the application for consistency with access and transportation regulations and standards, including providing safe and convenient pedestrian and bicycle system that connects local and regional destinations. As Policy 9.4 is related to a portion of the Castroville Community Plan that is located in the Coastal Zone, Artichoke Avenue improvements will not be moving |

[6] The Castroville Community Plan area is located within the North County Area Plan (Inland), which includes Opportunity Sites 8 through 15, 30, 39, 41, 44, 49, 50, 51, and 64. The North County Area Plan (Inland) contains no policies related to transit, roadway, bicycle, or pedestrian facilities, except congestion-related policies that are no longer used for CEQA analysis.

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| Policy 9.3: Adequate signage shall be provided to direct regional bicycle travelers through the community to connect with the various regional bicycle trails.<br>Policy 9.4: The Artichoke Avenue improvement project that will include a bicycle and pedestrian trail along the proposed Tembladero Slough shall be implemented.<br>Policy 9.5: A safe and attractive railroad underpass that connects to pedestrian and bike facilities connecting to North Monterey High School and the Moro Cojo housing development and other community facilities planned for the area east of Castroville Boulevard shall be provided.<br>Policy 9.6: Pedestrian/bike facilities shall be encouraged in required agricultural buffer areas and along slough enhancement areas. | forward as the Coastal Commission has not certified that portion of the Community Plan. The proposed project does not conflict with this policy. |

As described, the County of Monterey has plans and policies in place that encourage transit usage, the construction of safe and user-friendly active transportation facilities, and housing development within a half mile of transit stops throughout UMCUMC. These plans and policies encourage the development of a balanced transportation system that includes safe and convenient multimodal travel.

Figure 1 provides an overview map of the existing MST routes. MST is the public transportation system serving the County of Monterey and provides fixed-route bus services and demand-responsive services within the County, including bus rapid transit. They provide regional routes with service to Santa Cruz County, intercity routes and local routes with service covering 161 square miles and 906 stops throughout the County. Figure 2 shows existing rail service provided by Amtrak.

The rail service is a long-distance passenger rail service providing access to scenic destinations along the California Coast. Figure 3 shows the vision for future rail service in the region,[7] which is elaborated on in the Monterey Bay Area Network Integration Study (TAMC). The plan for future rail services is consistent with the California State Rail Plan which establishes a long-term vision for an integrated, cohesive statewide passenger and freight rail system.

Other transit service in the County includes Greyhound Bus Lines which provides inter-county service linking Monterey County with adjacent counties as well as a regional vanpool service operated by the California Vanpool Authority which organizes both traditional vanpools and vanpools serving agricultural workers.

Bicycle and pedestrian facilities are integral components of Monterey County's multimodal transportation system. Monterey County has approximately 213 miles of maintained bikeways on state, county, and local roads. The majority of bikeways in Monterey County are Class II (bicycle lanes) and Class III (bicycle routes), however large Class I facilities exist along the Monterey Peninsula coastline. Figure 4 and Figure 5 illustrate existing and proposed bicycle facilities. Pedestrian facilities also serve as a critical tool to advance transportation equity in the County. However, comprehensive data is not available for the pedestrian network.

### *Multimodal Methodology*

The impact of the proposed housing units was assessed based on their proximity to transit facilities, bikeway and pedestrian facilities. This included a specific focus on changes within a half-mile radius, and

[7] *2018 California State Rail Plan.*

bikeway and pedestrian connections to those sites. In order to conduct this evaluation, ½ mile buffer zones were created from transit stop data obtained from Monterey Salinas Transit and bicycle facility data provided by the Transportation Agency for Monterey County. There is no known source of comprehensive data on pedestrian facilities. The resulting buffer zones were then compared to the proposed opportunity sites in the Housing Element. The process for creating the buffers and completing the analysis is described in more detail below.

1) Setting Up the Network Dataset
To perform network analysis, a network dataset is required. The following steps outline the creation and setup:

- Create Network Dataset: Using GIS software, create a network dataset from the County's street and transit network data.
- Incorporate Data: Add the transit stop locations and routes, and bikeways into the network dataset.
- Configure Network Analyst: Set up the Network Analyst tool within the GIS software to recognize transit stops and routes.

2) Buffer Zone Creation
Buffer zones are created to represent areas within a specific distance from transit stations and bikeways. The following steps are performed:

- Define Buffer Distance: Establish a buffer distance of a half mile (0.5 miles) around each transit stop.
- Generate Buffers: Create buffer zones around each transit stop. This involves calculating the network distance and straight-line distance to account for actual travel paths.

3) Spatial Analysis
The proximity of proposed housing units to transit stations is analyzed as follows:

- Overlay Analysis: Overlay the buffer zones with the proposed housing unit locations.
- Identify Impacted Units: Identify housing units that fall within the half-mile buffer zones around transit stop.
- Accessibility Assessment: Assess the multi-modal accessibility of the proposed housing units to bike and transit facilities based on their proximity to transit stations and bikeways.be accessibility via

### *Multimodal Assessment*

Figure 6 and Figure 7 provide a map of the transit overlay analysis. It was determined that 94% of the housing units would be within a half mile of the County's existing transit stops. *Figure 4* and Figure 5 provide maps of the bicycle overlay analysis. As shown, 92% of the opportunity sites as identified in the Housing Element would be located within a half mile of bicycle facilities.

Developments that occur under the Housing Element are expected to comply with County design and guidelines to provide pedestrian access that ensures high connectivity. This includes the implementation of sidewalks, crosswalks, and other pedestrian-friendly infrastructure that links residential areas with activity centers, transit and other residential areas. The overlay analysis and the assessment of the proposed project demonstrate alignment with the County of Monterey's goals and policies for pedestrian connectivity. The Buildout conditions align with the AMBAG MTP performance metrics by promoting development within a half mile of transit stations, thereby enhancing pedestrian access to transit.

*Findings*

Many new residents will have the option to take transit to work or non-work destinations as shown in Figure 6 and Figure 7. Additionally, the proposed project is not expected to result in any adverse effects on any existing transit facilities. Furthermore, 92% of the housing units as part of the Housing Element would be located within a half-mile of bicycle facilities and have access to pedestrian facilities as shown in Figure 4 and Figure 5. The proposed Project is not expected to result in any adverse effects on any existing bike or pedestrian facilities.

The assessment of buffer zones aligns with the County of Monterey's goals and policies, ensuring high connectivity, providing access and mobility while maintaining quality of life, and promoting safe bicycle and pedestrian travel. Furthermore, it supports a balanced transportation system that encourages public transit use and meets the RTP goal for increasing affordability, accessibility, and safety.

As such, it was determined that the proposed Project would result in a less-than-significant multimodal impact and is in accordance with existing plans and policies.

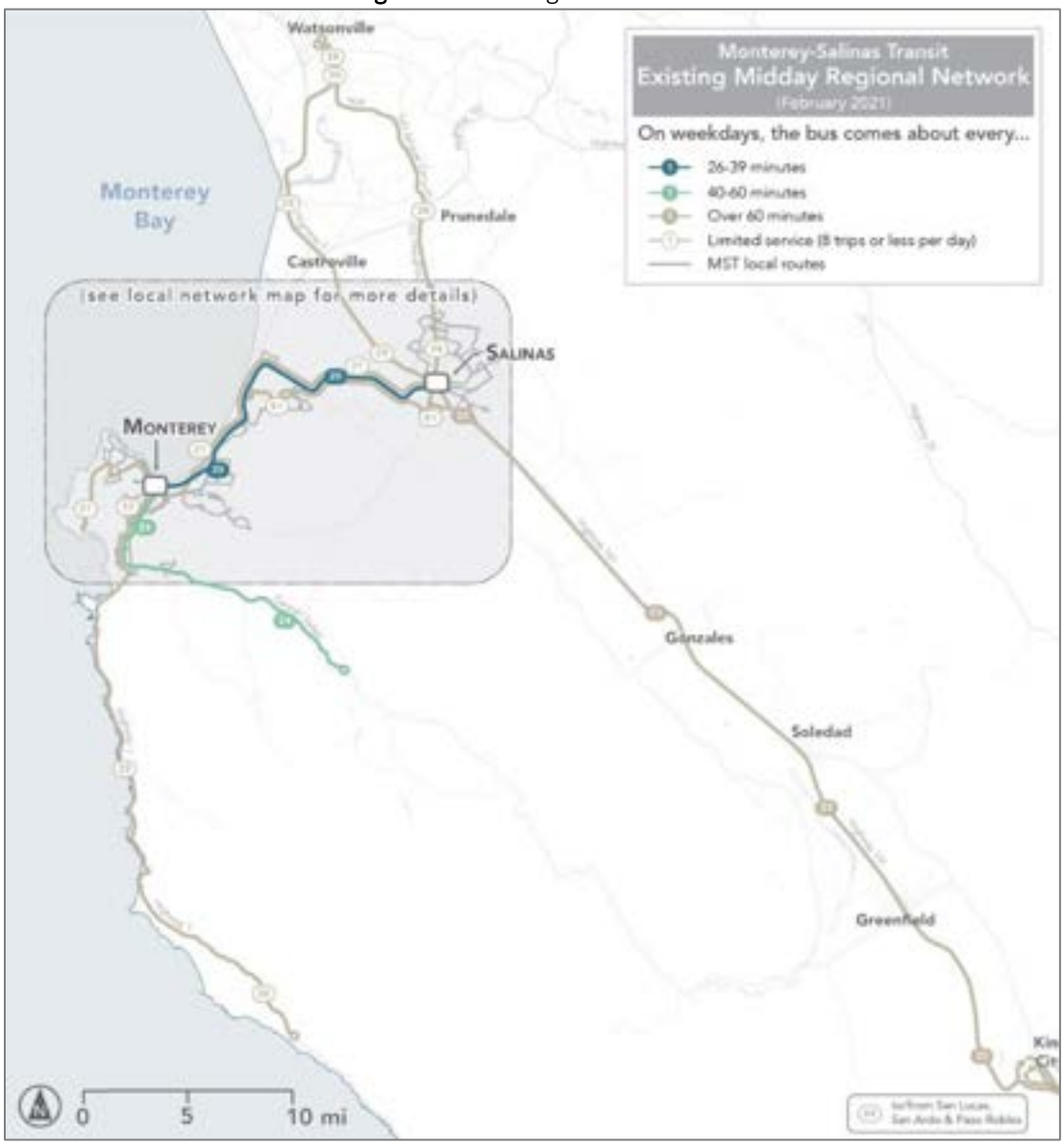
## Hazards

To determine whether the proposed Project will substantially increase hazards, the plan was evaluated for “a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)”. While the proposed Project will result in the modification of existing transportation facilities including the introduction of new site driveways and access points, all new roadway, bicycle, and pedestrian infrastructure improvements constructed due to the Housing Element would be subject to, and designed in accordance with, applicable County of Monterey design and safety standards to avoid creating a geometric design hazard or incompatible uses. Therefore, the proposed Project would be expected to result in a less-than-significant hazard impact.

## Emergency Access

The planning and design of new development resulting from the proposed Project would include considerations for road widths, intersections, and traffic flow to ensure that emergency vehicles can navigate efficiently as required by County of Monterey standards and guidelines. The County will also consider the need for increasing the availability of emergency to service new residents and housing as required. Based on this and the general distribution of proposed housing across the County of Monterey, it is determined that there will be a less-than-significant impact on emergency access.

**Figure 1** – Existing MST Routes[8]




[8] Source: *Monterey-Salinas Transit Regional Map* (2026), Monterey-Salinas Transit

**Figure 2 -** Amtrak Coast Starlight Service[9]




**Figure 3** – Future Regional Rail Services[10]




[9] Source: AMTRAK Coast Starlight, https://www.amtrak.com/coast-starlight-train
[10] Source: *2018 California State Rail Plan*, Caltrans

**Figure 4** – North County Bike Network with Buffer

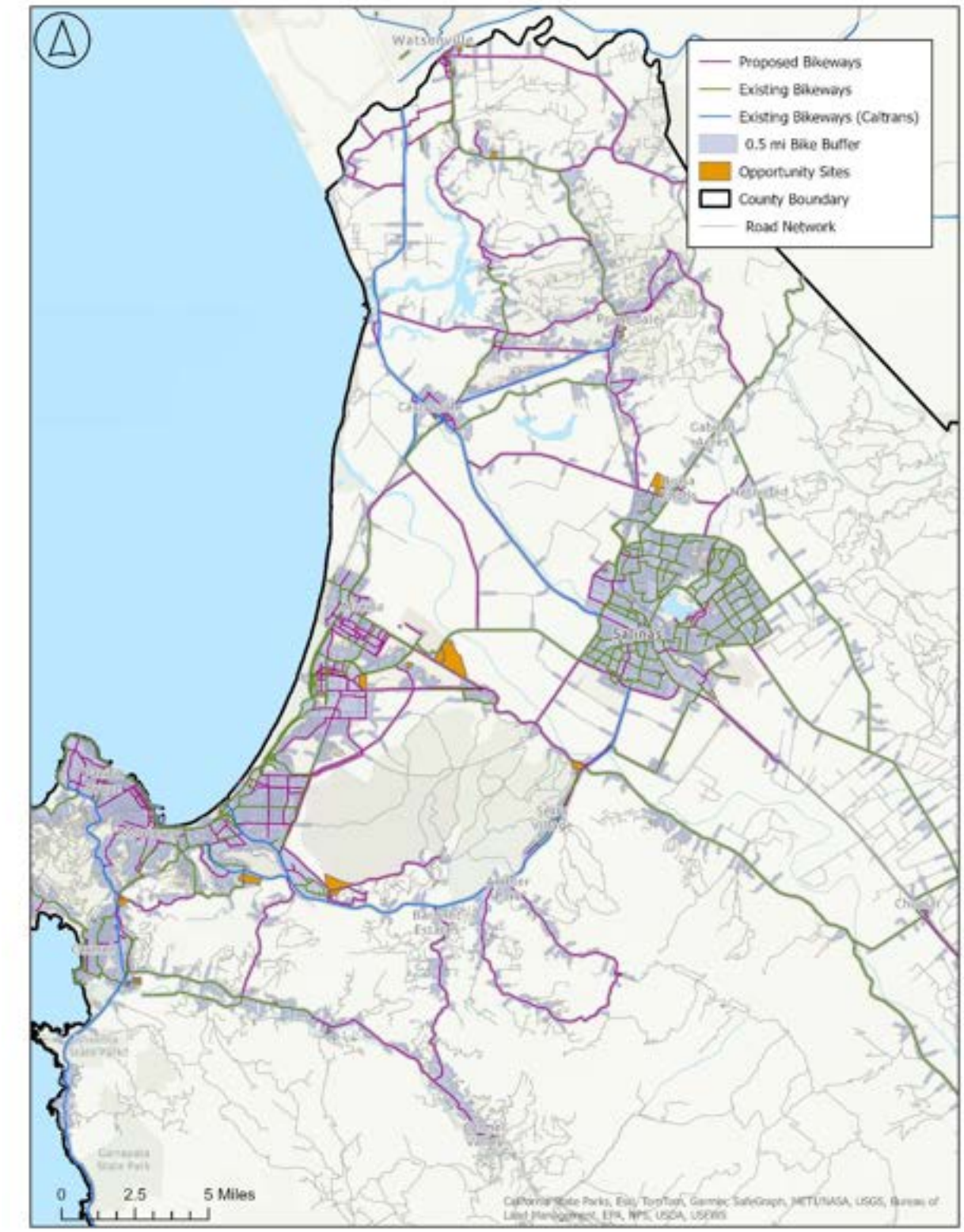


**Figure 5** – South County Bike Network with Buffer

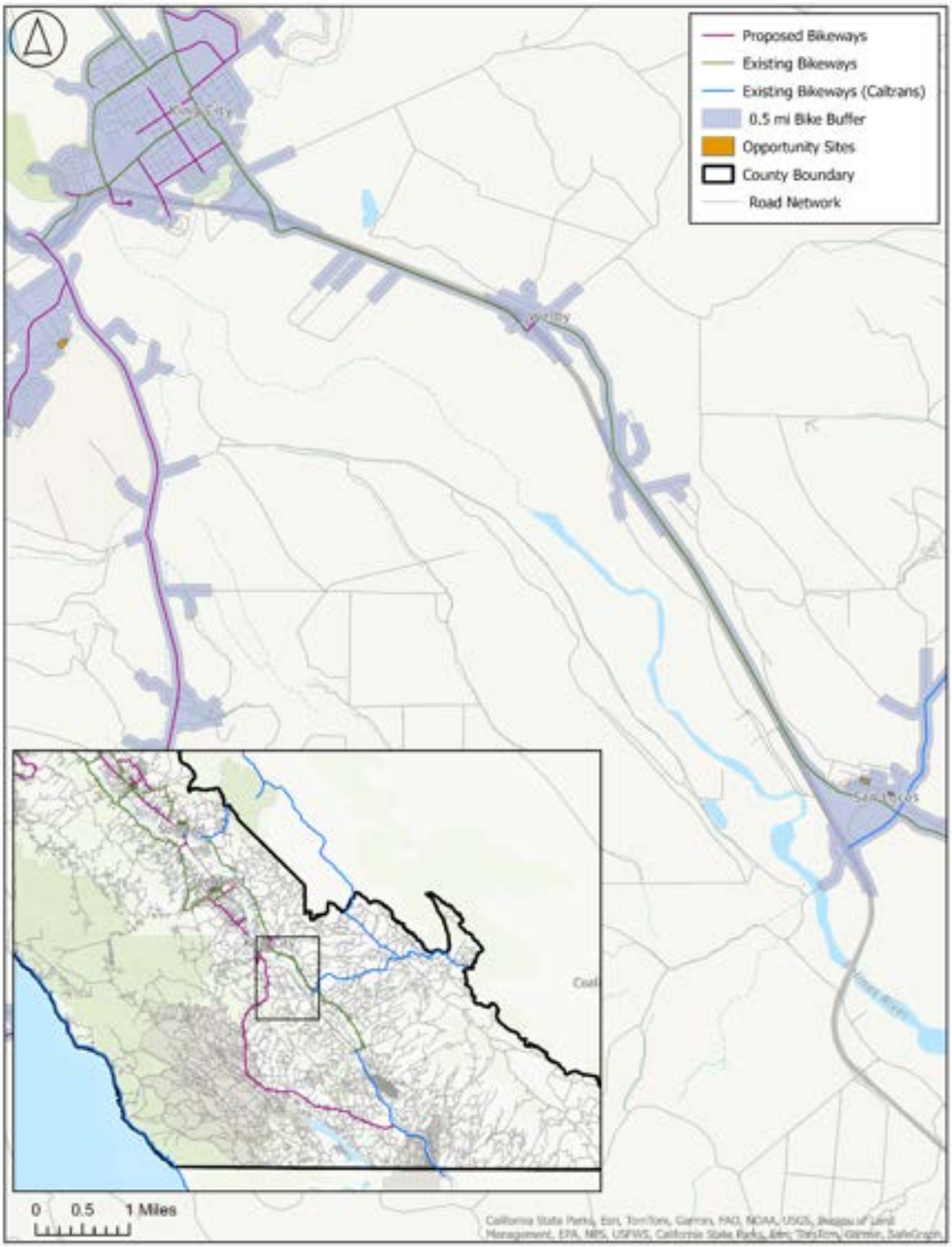


**Figure 6** – North County Transit Network with Buffer

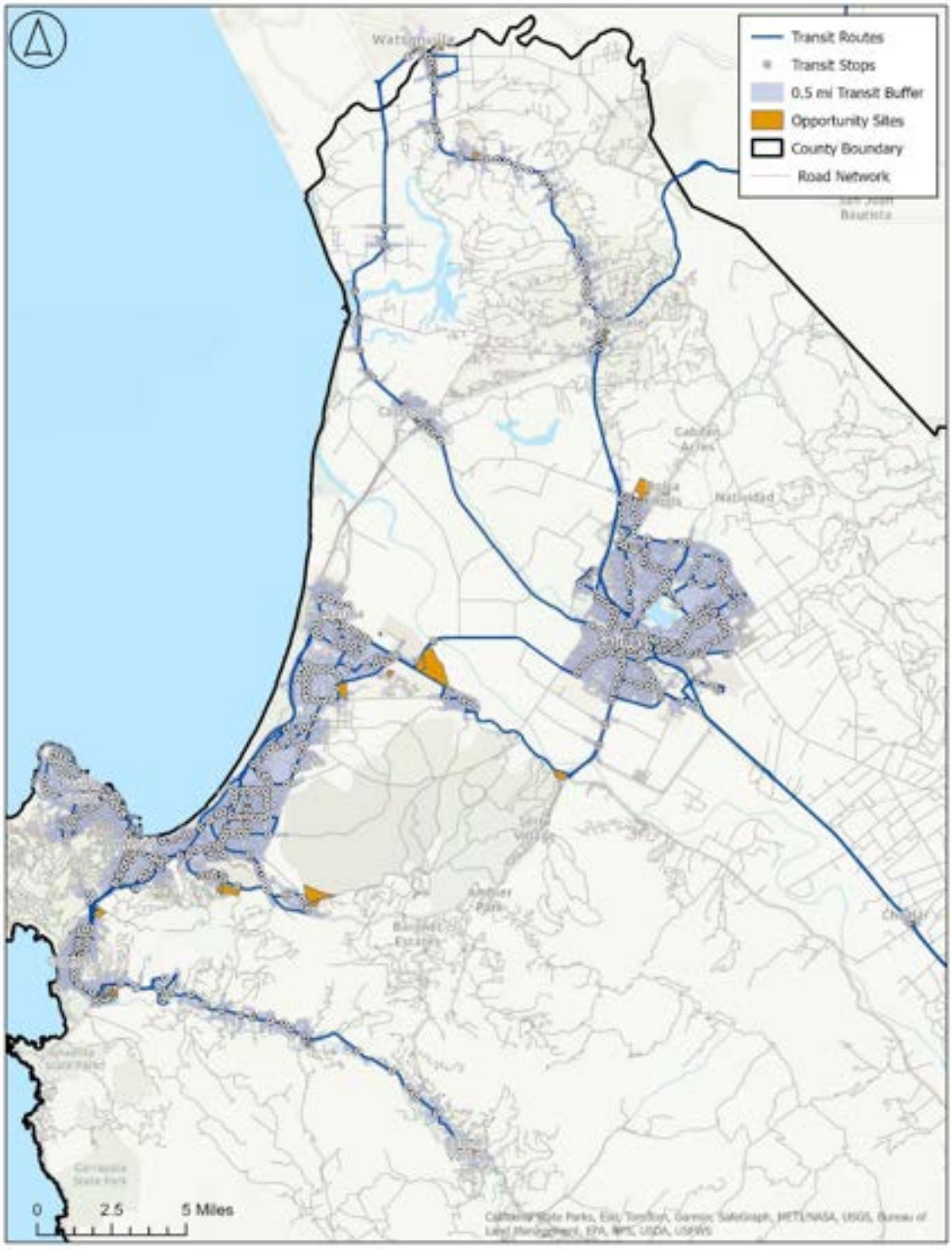
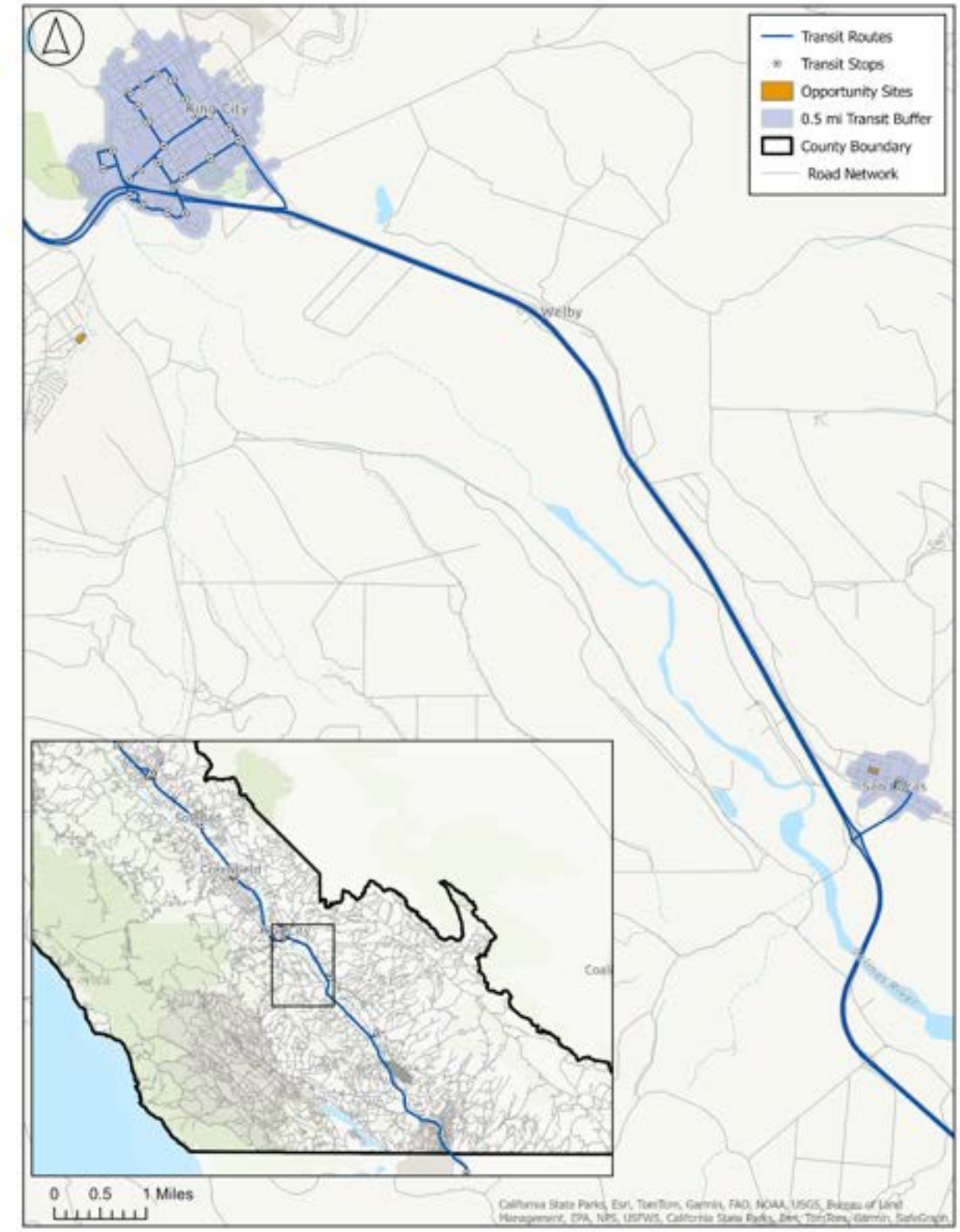


**Figure 7** – South County Transit Network with Buffer



## Findings

Based on the results of this analysis, the following findings are made:

- Based on analysis, the Project is determined to result in an unavoidable significant impact for VMT. In the aggregate, it is likely that this VMT analysis represents a worst-case scenario given that it does not fully represent the effect of planned VMT-reducing design principles or the effect that targeted mitigation measures may ultimately have on development projects. Additionally, the Housing Element Update includes a total of 56 opportunity sites totaling 4,434 housing units as a reasonable development capacity to meet the assigned RHNA target. However, this Transportation Analysis evaluates the theoretical maximum buildout scenario of 12,497 units to fully disclose the potential environmental consequences associated with the highest intensity of development legally permitted under the proposed rezoning acreage of 445.69 acres for impacts. This theoretical maximum was analyzed because the HEU6 proposes rezoning to either the HDR/25 (High Density Residential at maximum of 25 dwelling units per acre) or HDR/30 (High Density Residential at maximum of 30 dwelling units per acre). While these maximum densities are not supported by historical building trends nor align with market demand in UMC, they are legally permitted under the proposed rezoning, therefore, used for modeling VMT.

- As discussed in **Table 5** and in the assessment for Policies and Multimodal Analysis, the proposed Project aligns with the County of Monterey's goals and policies, ensuring connectivity, providing access and mobility while maintaining quality of life, and promoting safe bicycle and pedestrian travel and maintaining access to regional transit travel. The project would also not interfere with, degrade, or prevent the implementation of planned active transportation or transit infrastructure. As such, it was determined that the proposed Project would not conflict with programs, plans, and policies addressing circulation system, including transit, roadway, bicycle, and pedestrian facilities. and impacts would be less-than-significant.

- All new roadway, bicycle, and pedestrian infrastructure improvements constructed as part of the proposed Project would be subject to, and designed in accordance with, applicable County of Monterey design standards to avoid creating a geometric design hazard or incompatible uses. Therefore, the proposed Project would be expected to result in a less-than-significant hazard impact.

- The planning and design of new housing developments would include considerations for road widths, intersections, and traffic flow to ensure that emergency vehicles can navigate efficiently as required by County of Monterey standards and guidelines. The County will also consider the need for increasing the availability of emergency services. Based on this and the general distribution of sites across the County of Monterey, it is determined that there will be a less-than-significant impact on emergency access.

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**Incoming Text Messages:** Text/SMS messages will present as: **65513**
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**Questions:** AlertMontereyCounty@countyofmonterey.gov or visit our FAQS

## Bienvenido a A!erta Condado de Monterey

Alert Monterey County es el sistema oficial de alerta y advertencia de emergencia para el condado de Monterey y sus jurisdicciones municipales. Este sistema brinda información crítica sobre seguridad pública al público proveniente del gobierno local y los funcionarios de seguridad pública. El sistema Alert Monterey County es administrado por el Departamento de Manejo de Emergencias del Condado de Monterey y administrado por los puntos de respuesta de seguridad pública, las agencias del orden público, los bomberos, la salud pública y las agencias de manejo de emergencias.

**Contactos telefónicos:** Una vez registrado, **cree un nuevo contacto en su teléfono** para "Alert Monterey County" e incluya el siguiente número de texto/SMS, números de teléfono de audio y dirección de correo electrónico.
**Llamadas entrantes:** las alertas de llamadas telefónicas entrantes se presentarán como: **831-308-4911**
**Mensajes de texto entrantes:** Los mensajes de texto/SMS se presentarán como: **65513**
**Correos electrónicos entrantes:** las alertas por correo electrónico se presentarán como **"Alerta Condado de Monterey"** desde la dirección de correo electrónico **"noreply@genasys.com"**.
**Solución de problemas:** Si recibes el mensaje "El teléfono (o correo electrónico) ya está registrado", restablece

tu contraseña y continúa.

**Preguntas:** AlertMontereyCounty@countyofmonterey.gov o visita nuestras preguntas frecuentes

# Login

Email

OR

Prefix

+1

Phone number

Password

Forgot your password?

LOG IN

Don't have an account? Click here to register

FAQ

SITEMAP

# WILDFIRE EVACUATION CHECKLIST

Learn more at **https://www.readyforwildfire.org/prepare-for-wildfire/go-evacuation-guide/**

If evacuation is anticipated and time allows, follow this checklist to give your family and home the best chance of survival. Complete the Family Communication Plan on the opposite side for each family member and keep in your wildfire and emergency "Go Kit(s)."

## EVACUATION NOTIFICATIONS & INFORMATION *Register for Alert Marin and Nixle to receive evacuation and fire information notices!*

**ALERT MONTEREYCOUNTY** **alertmontereycounty.org when emergency action is needed** at a **specific address**: wildfires, imminent flooding, evacuations, or other public safety incidents where lives may be at risk; critical information about evacuation routes, hazards, and shelters. *Online registration required!*

**NIXLE** www.nixle.com
Used to provide **incident information**. Text MocoOES to 888777 and include any and all zip codes you want to be alerted for in your text. For daily fire updates for the River and Carmel fires text MCFIRES2020 to 888777.

**211**
You can call or text 211. Operators can provide updated fire and evacuation information. You can also text "fire" or "wildfire" to 211-211, add your zip code and receive links to current information.

**EVACUATION ORDER:** Leave now! Evacuate immediately. Do not delay to gather valuables or prepare your home. Follow any directions given in the evacuation order.

**EVACUATION WARNING:** Evacuate as soon as possible. A short delay to gather your *Go Kit* and prepare your home may be OK. Leave if you feel unsafe or conditions change.

**SHELTER IN PLACE:** Stay in your current location or the safest nearby building or unburnable area. May be required when evacuation is impossible, too dangerous, or unnecessary.

## ALWAYS:

### *COMMUNICATIONS*

- ☐ Keep your cell phone fully charged.
- ☐ Notify an out-of-area contact of your phone number, location and status. Update regularly.
- ☐ Leave a note with your contact info and out-of-area contact taped to fridge or inside a front window.
- ☐ Check on or call neighbors to alert them to prepare at first sign of fire.

### *ON YOUR PERSON*

- ☐ Dress all family members in long sleeves and long pants; heavy cotton or wool is best, no matter how hot it is.
- ☐ Wear full coverage goggles, leather gloves, head protection.
- ☐ Cover faces with a dry cotton or wool bandanna or scarf over an N95 respirator. Tie long hair back.
- ☐ Carry a headlamp *and* flashlight (even during the day).
- ☐ Carry car keys, wallet, ID, cell phone, and spare battery.
- ☐ Drink plenty of water, stay hydrated.
- ☐ Put "Go Kits" *(reverse)* in your vehicle.

### *PETS & ANIMALS*

- ☐ Locate your pets and place in carriers NOW. You won't be able to catch them when the fire approaches.
- ☐ Be sure your pets wear tags and are registered with microchips.
- ☐ Place carriers (with your pets in them) near the front door, with fresh water and extra food.
- ☐ Prepare horses and large animals for transport and consider moving them to a safe location early, before evacuation is ordered.

## IF TIME ALLOWS:

### *INSIDE THE HOUSE*

- ☐ Shut all windows and doors (interior too) and leave them *unlocked*.
- ☐ Remove combustible window shades and curtains; close metal shutters.
- ☐ Move furniture to the center of the room, away from windows.
- ☐ Leave indoor and outdoor lights on.
- ☐ Shut off HVAC and ceiling fans.

### *OUTSIDE & IN NEIGHBORHOOD*

- ☐ Place combustible outdoor items (patio furniture, toys, doormats, trash cans, etc.) in garage or 30' from structures (optional: place in a pool).
- ☐ Shut off gas at the meter or propane tank; move small tanks at least 15' away from combustibles.
- ☐ Connect garden hoses with squeeze-grip nozzles to outdoor spigots for use by firefighters.
- ☐ Fill water buckets and place around outside of house, especially near decks and fences.
- ☐ Clean your gutters and blow leaves away from house.
- ☐ Back your car into driveway, loaded, with doors and windows closed.
- ☐ Prop open fence and side gates.
- ☐ Place ladder(s) at the corner(s) of structures for firefighters.
- ☐ Seal attic and ground vents with pre-cut plywood or metal covers (even duct tape will protect from ember entry) if time allows.
- ☐ Patrol your property and monitor conditions. Leave if spot fires ignite or conditions change.

## WHEN YOU LEAVE:

- ☐ Leave immediately if ordered.
- ☐ Don't wait for an evacuation order if you feel unsafe or conditions change; leave early if unsure.
- ☐ Assist elderly or disabled neighbors.
- ☐ Carpool with neighbors to reduce traffic.
- ☐ Take only essential vehicles with adequate fuel.
- ☐ In your car, turn on headlights, close windows, turn on inside air and AC, tune to local radio.
- ☐ Drive slowly and defensively; be observant.
- ☐ The best evacuation route is usually the one you know best. Take the fastest *paved* route to a valley floor, away from the fire if possible.
- ☐ Proceed downhill, away from the fire if possible. Know at least two routes.
- ☐ If roads are impassable or you are trapped: take shelter in a building, car, or an open area; park in an *outside turn* if trapped on a hillside; stay far from vegetation; look for wide roads, parking lots, playing fields, etc.
- ☐ If trapped, you are better protected inside a building or vehicle.
- ☐ Don't abandon your car in the road if passage is impossible. If you must leave your car, park it off the road and consider other options for shelter.
- ☐ Evacuate on foot *only as a last resort*.
- ☐ Don't evacuate by fire road, uphill, or into open-space areas with unburned vegetation.
- ☐ Remain calm - panic is deadly.

Alert MONTEREY COUNTY

*Your Family's Name*

# Family Emergency Communications Plan

## HOUSEHOLD INFORMATION

ADDRESS .....

.....

PHONE .....

EMAIL .....

NAME .....

MOBILE .....

EMAIL .....

OTHER # or SOCIAL MEDIA .....

NAME .....

MOBILE .....

EMAIL .....

OTHER # or SOCIAL MEDIA .....

NAME .....

MOBILE .....

EMAIL .....

OTHER # or SOCIAL MEDIA .....

NAME .....

MOBILE .....

EMAIL .....

OTHER # or SOCIAL MEDIA .....

NAME .....

MOBILE .....

EMAIL .....

OTHER # or SOCIAL MEDIA .....

## SCHOOL, CHILDCARE, CAREGIVER, WORKPLACE

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

WEB .....

EMERGENCY PLAN/PICKUP .....

.....

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

WEB .....

EMERGENCY PLAN/PICKUP .....

.....

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

WEB .....

EMERGENCY PLAN/PICKUP .....

.....

## LOCAL CONTACTS

NAME ADDRESS .....

.....

PHONE .....

EMAIL .....

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

## OUT-OF-AREA CONTACTS

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

NAME .....

ADDRESS .....

.....

PHONE .....

EMAIL .....

## EMERGENCY MEETING LOCATIONS

LOCATION 1 .....

INSTRUCTIONS .....

.....

LOCATION 2 .....

INSTRUCTIONS .....

.....

LOCATION 3 .....

INSTRUCTIONS .....

.....

## IMPORTANT NUMBERS & INFORMATION

_____

_____

_____

_____

_____

_____

_____

_____

PHYSICIAN .....

PEDIATRICIAN .....

VETERINARIAN .....

## INSURANCE

HOMEOWNER/RENTER POLICY .....

.....

AUTO POLICY .....

MEDICAL POLICY 1 .....

MEDICAL POLICY 2 .....

# WILDFIRE & EMERGENCY "GO KIT"

Put together an emergency supply kit in advance for each family member and keep it easily accessible. Plan to be away from your home for an extended period of time. Each person should have their own Go Kit. Store kits in backpacks.

- ☐ Bandana, N95 respirator, goggles, leather gloves, long shirt and pants (cotton or wool), boots, hat
- ☐ Flashlight and headlamp with spare batteries
- ☐ Extra car keys, credit cards, cash
- ☐ Map marked with two evacuation routes (if possible)
- ☐ Prescription medications
- ☐ Extra eyeglasses or contact lenses
- ☐ First aid kit
- ☐ Battery-powered radio and extra batteries
- ☐ Copies of important docs (birth certificates, passports, insurance policies, etc.)
- ☐ Pet food and water, leashes, pet supplies and medications
- ☐ Water bottles and food
- ☐ Sanitation supplies
- ☐ Change of clothing
- ☐ Spare chargers for cell phones, laptops, etc.

### Items to take *only if time allows*:

- ☐ Easily carried valuables
- ☐ Family photos, small heirlooms, and other irreplaceable items
- ☐ Personal computer data and digital information backups on hard drives and/or disks

https://www.readyforwildfire.org/prepare-for-wildfire/go-evacuation-guide/

# County of Monterey

Emergency, Readiness, Response, and Recovery

Prepare
(https://www.readymontereycounty.org/prepare)
Emergency
(https://www.readymontereycounty.org/emergency)
Recover
(https://www.readymontereycounty.org/recover)

# Get Ready & Prepare

## Evacuation Warning

### An Evacuation Warning

(i.e. sometimes used interchangeably with the term "Advisory") means those in a specific area should be prepared to evacuate at any time. You do not need to leave your home at this time but please be alert and prepared to leave if an evacuation order is called.

## Evacuation Order

**An Evacuation Order** means those in a specific area should leave immediately.

If you feel that your life is in danger, do not wait for an emergency notification to take action.

**If your situation requires more time to evacuate than an immediate order to leave allows, consider leaving early to avoid delays due to traffic congestion.**

### Evacuation Warning/Order Lifted

**When evacuation orders are lifted**, you may return home but make sure to do so safely! Read up on how to return home safely and clean up after the fires click the Fire Resource Recovery button at the top of this page

### Shelter-in-Place

Shelter-in-place is the act of seeking safety within the building one already occupies, rather than evacuating the area or seeking a community emergency shelter.

## Plan to Evacuate

Many kinds of emergencies can cause you to have to evacuate. In some cases, you may have a day or two to prepare while other situations might call for an immediate evacuation. Planning is vital to making sure that you can evacuate quickly and safely no matter what the circumstances.

## Before an Evacuation

- **Stay informed by registering (https://www.readymontereycounty.org/prepare/stay-informed) for Emergency Alerts** to receive area-specific emergency information, including evacuation orders and sheltering information.
- Learn the types of hazards (https://www.co.monterey.ca.us/government/departments-a-h/administrative-office/office-of-emergency-services/hazard-mitigation) are that are likely in your community and the local emergency, evacuation and shelter plans for each specific disaster.
- Plan (https://www.readymontereycounty.org/prepare/make-a-plan) how you will leave and where you will go if you are advised to evacuate. Come up with a family/household plan to stay in touch in case you become separated; have a meeting place and update it depending on the circumstance.

- Identify several places you could go in an emergency such as a friend's home in another town or a motel. Choose destinations in different directions so that you have options during an emergency.
- If needed, identify a place to stay that will accept pets (https://www.spcamc.org/for-pet-owners/help-caring-for-your-pet/pet-friendly-lodging.html). Most public shelters allow only service animals. Contact the SPCA of Monterey County (https://www.spcamc.org/) to get additional advice and information if you're unsure how to care for your pet in case of an emergency.
- Be familiar with alternate routes and other means of transportation out of your area.
- Always follow the instructions of local officials and remember that your evacuation route may be on foot depending on the type of disaster.
- Assemble supplies that are ready for evacuation. Prepare a"go-bag" (https://www.readymontereycounty.org/prepare/build-a-kit) you can carry when you evacuate on foot or public transportation and supplies for traveling longer distances if you have a car.
- If you have a car:
  - Keep a full tank of gas if an evacuation seems likely. Keep a half tank of gas in it at all times in case of an unexpected need to evacuate. Gas stations may be closed during emergencies and unable to pump gas during power outages. Plan to take one car per family to reduce congestion and delay.
  - Make sure you have a portable emergency kit in the car (https://www.ready.gov/car).
- If you do not have a car, plan how you will leave if needed. Decide with family, friends or your local emergency management office to see what resources may be available.

## During an Evacuation

During an emergency if your life or safety is threatened and you need to evacuate, move away from the threat and follow official instructions. You should assess the situation and listen to officials to make informed decisions about your safety. If you are told by officials to evacuate, you should follow their lawful order. If you feel unsafe or your life is threatened, do not wait for an emergency alert and leave immediately. First responders may not be able to reach you in some emergencies.

Evacuating the area early helps first responders keep roads clear of congestion, and lets them move more freely to do their job. People with disabilities or access and functional needs should consider leaving during an Evacuation Warning to allow for more time.

When evacuating keep the following recommendations in mind:

- Leave early enough to avoid being trapped.
- Take your pets with you but understand that only service animals may be allowed in public shelters.
- Wear sturdy shoes and clothing that provides some protection such as long pants, long-sleeved shirts and a hat.
- If time allows:
  - Call or email the out-of-state contact in your family communications plan (https://www.ready.gov/make-a-plan). Tell them where you are going. Leave a note saying when you left, your route, and destination.
  - Secure your home by closing and locking doors and windows.
  - Unplug electrical equipment such as radios, televisions and small appliances. Leave freezers and refrigerators plugged in unless there is a risk of flooding. If there is damage to your home and you are instructed to do so, shut off water, gas and electricity before leaving.
  - Leave a note telling others when you left and where you are going.
  - Check with neighbors who may need a ride. Carpool when possible to help avoid congestion.
- Follow recommended evacuation routes. Do not take shortcuts,they may be blocked.
- Be alert for road hazards such as washed-out roads or bridges and downed power lines. Do not drive into flooded areas.

Once you have safely evacuated, go to a loved one's home, stay with a friend, or go to a hotel, if possible. Make sure to pick a location that is accessible to all, including pets and those with disabilities. If you have nowhere else to go, go to a evacuation shelter. Public shelters may open to help meet basic needs after large disasters.

If you are trapped, you are better protected inside a building or vehicle. **Evacuate on foot only as a last resort.** Stay calm and use your cell phone to call 911 in order to advise officials on your location.

## After an Evacuation

If you evacuated, check with local officials before you return home.

- If you are returning to disaster-affected areas, after significant events prepare for disruptions to daily activities and remember that returning home before storm debris is cleared is dangerous.
- Let friends and family know before you leave and when you arrive.
- Charge devices and consider getting back-up batteries in case power-outages continue.
- Fill up your gas tank and consider downloading a fuel app to check for outages along your route.
- Bring supplies such as water and non-perishable food for the car ride.
- Avoid downed power or utility lines, they may be live with deadly voltage. Stay away and report them immediately to your power or utility company.
- Only use generators outside and away from your home and NEVER run a generator inside a home or garage or connect it to your home's electrical system.

## Additional Resources

- CAL FIRE Wildfire Evacuation Information (https://www.readyforwildfire.org/prepare-for-wildfire/go-evacuation-guide/)
- Evacuation Checklist (https://www.co.monterey.ca.us/home/showdocument?id=95655)
- Tips for Evacuation (https://www.co.monterey.ca.us/home/showdocument?id=95657)

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## County of Monterey
## Department of Emergency Management

info.dem@co.monterey.ca.us
Office Telephone: (831) 796-1905
Emergencies: 9-1-1
Disaster Services: 2-1-1

### Register for Emergency Alerts

Alert Monterey County (https://alertmontereycounty.genasys.com/portal/en)

### Helpful Links

Prepare (/prepare)

Emergency Information (/emergency)

Recovery (/recover)

Sitemap (/recover/dem-site-map)

### Follow Us on Social Media

Facebook: Monterey County
Department of Emergency Management (https://www.facebook.com/MontereyCoDEM/)

Twitter: @MontereyCoDEM (https://twitter.com/MontereyCoDEM)

Instagram: @MontereyCoDEM (https://www.instagram.com/montereycodem/)

**County of Monterey**

Emergency, Readiness, Response, and Recovery

Prepare (https://www.readymontereycounty.org/prepare)

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# Get Ready & Prepare

### Step 1

Put a plan together by discussing the questions with your family, friends or household to start your emergency plan

1. What types of hazards (http://www.co.monterey.ca.us/government/departments-a-h/administrative-office/office-of-emergency-services/hazard-mitigation) are most likely where I live, work, and go to school?
2. How will I receive emergency alerts and warnings (https://www.readymontereycounty.org/prepare/stay-informed)?
3. What is my shelter (http://www.ready.gov/shelter) plan?
4. What is my evacuation (http://www.ready.gov/evacuation) route?
5. What is my family/household communication plan (https://www.ready.gov/sites/default/files/2021-02/family-emergency-communication-plan.pdf)?
6. Do I need to update my emergency preparedness kit (https://www.ready.gov/kit)?

### Step 2

Consider specific needs in your household

As you prepare your plan tailor your plans and supplies to your specific daily living needs and responsibilities. Discuss your needs and responsibilities and how people in the network can assist each other with communication, care of children, business, pets or specific needs like operating medical equipment. Create your own personal network for specific areas where you need assistance. Keep in mind some these factors when developing your plan:

- Different ages of members within your household
- Responsibilities for assisting others
- Locations frequented
- Dietary needs
- Medical needs including prescriptions and equipment
- Disabilities or access and functional needs including devices and equipment
- Languages spoken
- Cultural and religious considerations
- Pets or service animals

- Households with school-aged children

## Step 3

Fill out a Family Emergency Plan

Communication networks, such as mobile phones and computers, could be unreliable during disasters, and electricity could be disrupted. Planning in advance will ensure that all members of your household- including children and people with access and functional needs- know how to reach each other and where to meet up in an emergency. Important things to include in your emergency plan include:

- **Phone Numbers:** Post emergency numbers in a central place where they won't be missed. Include the numbers for police, fire, poison control, school, work, child care and important relatives. Include your home address for quick reference since emergency respondents will need to know where to find you.
- **Emergency Contact:** It's often easier to call long distance during an emergency. Choose an out-of-state relative as your family's emergency contact. They'll be the point person you call or text to explain where you are in the event of a natural disaster.
- **Escape Routes:** Go through each room of your home and plan the quickest and safest escape route. Make sure each member of your family knows the plan for each room. Practice the plan, so they know how to act should they need to make a quick escape.
- **Emergency Meeting Spots**: Choose three spots, just to be on the safe side. In case of fire, elect one place near your home. Select another spot outside your neighborhood (such as the fire station or a relative's home). Pick one out-of-town location in case you need to evacuate.
- **Pet Plan:** If your family has pets, include your four-legged family members in your emergency plan. Make sure you have any necessary pet carriers and plenty of food and water on hand to take with you. Learn More (https://www.readymontereycounty.org/prepare/animal-ready) about planning for pets and animals in emergencies.
- **Important Documents**: Put your important documents in a plastic bag. Keep the bag in a fireproof and waterproof box for easy grabbing if you have to evacuate. Learn More (https://www.readymontereycounty.org/prepare/build-a-kit) about which important documents you should include.
- **A "Go-Bag:"** This ready-to-go supply kit can help your family leave home quickly. Learn (https://www.readymontereycounty.org/prepare/build-a-kit) about what to include in your go-bag.

Download and fill out a family emergency plan or use it as a guide to create your own.

**Create Your Family Emergency Communication Plan** in English (https://www.ready.gov/sites/default/files/2021-04/family-emergency-communication-plan.pdf) or Additional Languages (https://www.ready.gov/collection/family-emergency-communication-plan)

**Family Communication Plan Fillable Card** in English (https://www.ready.gov/sites/default/files/2020-03/family-communication-plan_fillable-card.pdf)or Additional Languages (https://www.ready.gov/collection/family-communication-plan-fillable-card)

**Family Disaster Plan Template** (https://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan.html) in English

(https://www.redcross.org/content/dam/redcross/atg/PDF_s/Preparedness___Disaster_Recovery/General_Preparedness___Recovery/H

Spanish

(https://www.redcross.org/content/dam/redcross/atg/PDF_s/Preparedness___Disaster_Recovery/General_Preparedness___Recovery/H

## Step 4

Practice your plan with your family/household

Preparing your family for a disaster involves more than just creating a plan. Each family member, especially children, needs to know exactly what to do during an emergency. Here are some helpful suggestions to communicate the importance of disaster preparedness to your family.

- **Designate Roles:** Give everyone in your family a responsibility. Each family member is an integral part of the plan and each has an important contribution.
- **Role-Play:** Younger family members may be easily upset if they see a parent worried or panicking. Spend an afternoon pretending an emergency has occurred and allow everyone to practice their designated roles. This will help your family be better prepared for the rush of emotions they may experience during a disaster.
- **Visit Emergency Meeting Places**: Make certain your family is familiar with your designated emergency meeting places. Assist family members in recognizing landmarks (i.e., buildings, signs, curiously shaped trees or other landmarks, etc.) to help remind them of where they are or where they should be going. Ensure all family members memorize emergency rendezvous location addresses.
- **Introduce Your Family to Emergency Contacts:** Young children may not be comfortable talking with strangers, even strangers their parents have designated as safe. Introduce your children to emergency contacts and explain their role in your family's emergency plan. Instruct children regarding safe authority figures, such as firemen, police officers, sheriff's deputies, etc.
- **Practice:** Regularly quiz family members about the family's emergency preparedness plan. Make it a game for younger children. *Who's our local emergency contact? Where do we go when there's an emergency? Who's responsible for watching the dog? What is our address? What are the phone numbers you will call? What will you do if we get separated? Where is the emergency kit stored and what is in it? Where is the water stored? How do you use a cell phone or landline?* The more the family practices the plan, the better family members will be able to recall what to do during an actual emergency.
- **Point Out Emergency Essentials:** Be sure everybody in your family knows the location of your Emergency Supply Kit (https://www.readymontereycounty.org/prepare/build-a-kit). Keep your Emergency Supply Kit in one place, if you move it, let everyone know the new storage location.
- **Be Honest**: Everyone in your family will have questions about preparedness. Take the time to address questions, concerns, and fears, honestly and factually. Discuss mental health concerns, evacuation, sheltering, and returning home. Emphasize, although the situation may be difficult, and there may be loss and/or sadness, the family has made and practiced the plans to survive and recover from any disaster situation.

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Sitemap (/recover/dem-site-map)

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Twitter: @MontereyCoDEM (https://twitter.com/MontereyCoDEM)

Instagram: @MontereyCoDEM (https://www.instagram.com/montereycodem/)

# EVACUATING IN EMERGENCIES

**Evacuate (leave the area) if you are told to by officials or if there is a threat in your area, such as a fire, tsunami or flood. Specific instructions & length of evacuation depends on the emergency. To prepare for evacuation:**

## 1. GATHER SUPPLIES

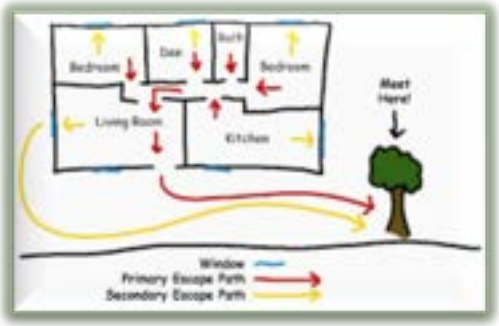



- ☐ **Have an evacuation kit** with 3 days including water, food and medicine, clothes, sturdy shoes, important documents, and valuable possessions ready to go.
- ☐ **Keep gas tanks at least halfway full**; *gas stations may be closed.*




- ☐ **Have at least two ways out of** your home, school, work, neighborhood, & city. *Know how to manually open/close gates & garages*
- ☐ **Have multiple methods of transportation** to evacuate out of the area
- ☐ **Have designated meeting places** just outside of your home, neighborhood and city, in different directions, so that you have a place to go if you can't return home, no matter where the threat is coming from.
- ♦ Meeting locations should be in **safe, familiar locations and accessible to all**, including pets, where you can stay until it is safe to return home.

## 3. PRACTICE IT




- ☐ **Have evacuation drill** regularly and practice evacuating from all locations you spend a lot of time at.
- ♦ Use different starting points, routes and exits, every time you practice
- ♦ Practice with & without others, and at different times of day/night.

**TERMS TO KNOW**

**EVACUATION ORDER**: Immediate threat to life. This is a lawful order to leave now & close the area to public access. *Some regions also use the term Mandatory Evacuation.*

**EVACUATION WARNING**: Potential threat to life and/or property. Those who require additional time to evacuate, and those with pets and livestock should leave now. *Depending on the emergency, there may not be time to issue an Evacuation Warning.*

# EVACUATING IN EMERGENCIES

**IF TOLD TO EVACUATE, YOU SHOULD:**



**1. LEAVE IMMEDIATELY** if you have been told to evacuate or you feel it is unsafe to remain in your home. *If you have the time:*

- ✓ **Lock doors & windows**
- ✓ **Shutoff utilities** if instructed to by officials
- ✓ **Unplug electrical equipment** (ex. TVs, small appliances) Leave freezers & refrigerators plugged in unless there is a risk of flooding.
- ✓ **Wear sturdy shoes and protective clothing** (ex. Long pants, long-sleeved shirts, hat)
- ✓ **Bring your pets and emergency kit** with you
- ✓ **Take one car per family** when possible to help avoid congestion
- ✓ **Check with neighbors** who may need a ride
- ✓ **Call loved ones and leave a note** saying when you left, your route & destination.

**2. FOLLOW OFFICIAL INSTRUCTIONS**

- × **Don't take shortcuts**; they may be blocked.
- × **Watch for hazards** (ex. flooded areas & downed powerlines).

**3. GO TO A LOVED ONE'S HOME OR HOTEL,** if possible

- ♦ Pick a location that is accessible to all, including pets and those with disabilities
- ♦ Go to a public shelter if you have nowhere else to go.
- ♦ Be patient & cooperative wherever you go.

For information on current emergencies and to find shelters near you go to
**Monterey County Office of Emergency Services website**
https://www.co.monterey.ca.us/office-of-emergency-services
or **Call/Text 211**

*Public shelters can open to help meet basic needs after large disasters. Keep in mind that:*

**They're confined places**, with many people, & little privacy.

**They don't accept pets**, only service animals *(In Monterey County, SPCA provides animals shelters near public shelters when possible)*

**They don't allow alcohol or weapons & restrict smoking**

**4. STAY INFORMED and DON'T return home until officials say it is safe to do so!**

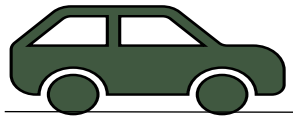
- ✓ Watch the local news
- ✓ Listen to local and NOAA radios
- ✓ Check your city/county's websites and social media regularly.
- ✓ Follow official instructions

# COMING HOME

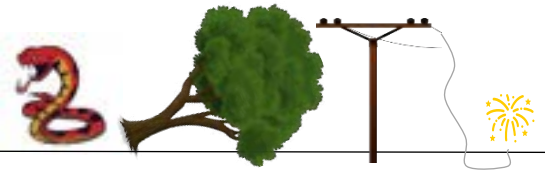
**RETURN HOME IN THE DAY AND ONLY AFTER AUTHORITIES SAY IT IS SAFE.**

Expect hazards and utility disruption, proceed with caution, and be prepared to leave again, if officials tell you to.

**Avoid bringing children and pets** on the first trip back home.



**Don't corner, capture, or try to rescue wild animals and never move a dead animal.** Call local animal control or wildlife resource office if an animal is dead, injured, trapped or won't leave your home.



**NEVER enter a building if you doubt it's safety, smell gas/rotten eggs, or see damage, or flooding.** Call a building professional (ex. structural engineers, contractors, plumbers, home inspectors) or FEMA to inspect it before entering.



**Don't turn on lights/flashlights or spark matches/lighters indoors until verifying there is no gas leak or electrical issues.**



**Don't use water until it has been tested by authorities.**

**Don't flush toilets until verifying sewage lines are intact.**

## *BEFORE RETURNING*

- **Inform loved ones** before you leave & when you arrive.
- **Fill up gas tanks and fully charge phones.**
- **Bring supplies**:
  - ☐ Food/Water
  - ☐ Camera/Phone
  - ☐ Protective Clothes (sturdy boots, long sleeve shirts, pants, helmet, safety goggles, dust mask, work gloves)
  - ☐ Flashlight & Portable Radio
  - ☐ Portable Charger & Extra Batteries
  - ☐ Proof of Residency

## *ON THE WAY HOME*

- **Watch for, avoid, and notify authorities & others about hazards** (ex. wild animals, damaged roads/building/overpasses, downed power lines, broken glass, flooding).
- If you encounter an animal in your home, **open a window/provide an escape route**. It will likely leave on its own.
- If bitten by an animal, **seek immediate medical attention, stay calm and try to see and remember the color and shape of the snake.**
- If a power line falls on your vehicle **stay inside the car, call 911, and warn others to stay away.**

## *BEFORE ENTERING YOUR HOME:*

- **Walk carefully around the outside**, checking for structural damage, roof, chimney, or foundation cracks, loose power lines, & gas leaks.
- **Before reentering, call FEMA or a building professional** (ex. structural engineers, contractors, plumbers, home inspectors) to inspect your home.
- **Keep your radio and cell phone on you** in case of emergencies.
- **Bring a flashlight & turn it on before entering the building**.

## *WHEN ENTERING YOUR HOME:*

- **Enter carefully,** open cabinets and doors with caution and watching for hazards (slippery floors, broken glass, loose boards, wild animals, glass)
- If the house has been closed up for several days, enter briefly to **open doors and windows** to let the house air out for a while (at least 30 minutes) before you stay for any length of time.
- **Sniff for gas leaks**, starting at the water heater, **check the electrical system** for sparks, breaks, or frayed wires, and **check for water leaks.**
- **Shutoff damaged gas, power, and water lines** as needed. If in doubt contact, your utility provider
- **Check with local authorities before using any water and pump out wells**; the water could be contaminated.